INTERNATIONAL FINANCIAL MANAGEMENT

Polytechnic Series

Mazwina Hanim binti Abu Bakar
Azma Husnaiza binti Abdul Aziz
Fairuz Sofia binti Kaharuddin

INTERNATIONAL FINANCIAL MANAGEMENT

INTERNATIONAL FINANCIAL MANAGEMENT

Special project by :
Mazwina Hanim binti Abu Bakar
Azma Husnaiza binti Abdul Aziz
Fairuz Sofia binti Kaharuddin

eISBNNo: e ISBN 978-629-7667-62-1

First Published in 2025 by:

UNIT PENERBITAN

Politeknik Sultan Salahuddin Abdul Aziz Shah
Persiaran Usahawan,
Seksyen U1,
40150 Shah Alam
Selangor

Telephone No. :0351634000
Fax No. :0355691903

PREFACE

he field of international financial management has become increasingly vital in today's interconnected global economy. As businesses expand beyond borders and financial markets evolve, understanding the complexities of managing finances on an international scale is more crucial than ever.

This book, International Financial Management, Polytechnic series is designed to provide readers with a comprehensive understanding of the principles, strategies, and challenges faced by financial managers operating in a global environment. The material presented is enriched by real-world examples to ensure it resonates with students, educators, and practitioners alike.

This book covers key topics such as international financial market, foreign exchange markets, exchange rate determinants and forecasting, trade financing, methods of payment and financial risk.

IWe would like to express our gratitude to the academic community, colleagues, and students who have inspired us through their questions, feedback, and shared passion for the subject. We also extend our appreciation to the institutions that have supported our professional development and research over the years.

It is our hope that this book not only enhances reader's knowledge but also inspires confidence in navigating the dynamic world of international financial management.

ABOUT
AUTHOR

MAZWINA HANIM BINTI ABU BAKAR

Mazwina Hanim binti Abu Bakar is an experienced educator with over 17 years of expertise in the fields of Technical and Vocational Education and Training (TVET), particularly in financial management and banking. Holding a Master's degree in Finance from Universiti Utara Malaysia, she has specialized in areas including corporate financial management, investment, and international financial management. This background not only enriches her teaching but also serves as a strong foundation for her research and publications, making her a credible voice in the financial field.

Throughout her career, she has been committed to advancing knowledge in the realms of finance and economics, publishing numerous articles and eBooks, including Foreign Exchange Market for Beginners. Her recent research on customer engagement, SMEs performance, and investment behaviors demonstrates a deep understanding of both the theoretical and practical aspects of financial management.

In addition to her academic achievements, she has earned several prestigious awards, including Silver Awards at the International Creative and Innovative Product Exhibition 2023 and Best Presenter accolades at multiple conferences. Her strong leadership, collaborative skills, and dedication to fostering learning make her a valued educator and researcher in her field.

ABOUT
AUTHOR

AZMA HUSNAIZA BINTI ABDUL AZIZ

Azma Husnaiza binti Abdul Aziz is an experienced educator with over 14 years of involvement in Technical and Vocational Education and Training (TVET), focusing on operations, business management, and supply chain disciplines. She holds a Master's degree in Logistics from Universiti Brunei Darussalam and a Bachelor of Business from the University of Tasmania, Australia.

Her experience in teaching subjects across business, logistics, and financial management has developed her keen interest in how financial decisions influence operational efficiency and global trade performance. This practical connection between operations and finance forms the foundation of her approach to teaching International Financial Management, where she emphasizes real-world business scenarios, financial risk awareness, and cross-border decision-making for future professionals.

Her current academic focus includes integrating financial literacy within supply chain education and enhancing student understanding through case-based and applied learning. Passionate about TVET transformation, she continuously explores innovative teaching strategies and digital tools to make financial and business concepts more accessible and relevant to learners.

ABOUT AUTHOR

FAIRUZ SOFIA BINTI KAHARUDDIN

F**airuz Sofia Binti Kaharuddin** is an experienced educator with over a decade of expertise in the field of finance and business education. Currently serving as a lecturer at Politeknik Sultan Salahuddin Abdul Aziz Shah, she has dedicated her career to developing learners' understanding of financial literacy, corporate management, and investment analysis.

She holds a Bachelor's degree in Business Management from Universiti Teknologi MARA (UiTM) and a Master of Science in Finance from Universiti Utara Malaysia (UUM). Her strong academic background and years of teaching experience have enabled her to bridge theory with practice, particularly in preparing students to meet the evolving demands of the financial industry.

Fairuz Sofia's professional interests include financial decision-making, capital market studies, and pedagogical innovation in TVET education. She continues to contribute actively to academic excellence through course development, research engagement, and mentorship—empowering students to apply financial knowledge effectively in real-world contexts.

TABLE OF CONTENT

- CHAPTER 1: International Financial Market 1
- CHAPTER 2: Foreign Exchange Market 17
- CHAPTER 3: Exchange Rate Determinants and Forecasting 44
- CHAPTER 4: Trade Financing 79
- CHAPTER 5: Methods of Payment 109
- CHAPTER 6: Financial Risks 123
- Reference 129

CHAPTER 1

INTERNATIONAL FINANCIAL MANAGEMENT

1.0 Financial System

- A financial system is a network of financial institutions such as insurance companies, stock exchanges, and investment banks that work together to exchange and transfer capital from one place to another.

- It is essential for channelling funds from savers to borrowers and plays a pivotal role in economic growth by facilitating investments.

- The function of financial system is as a bridge between surplus and deficit units, ensuring efficient capital allocation.

- This financial system allows the exchange of funds between financial market participants such as lenders, investors and borrowers. Investors receive capital to fund projects and receive a return on their investments.

- Financial system operates at national and global.

Components of Financial System

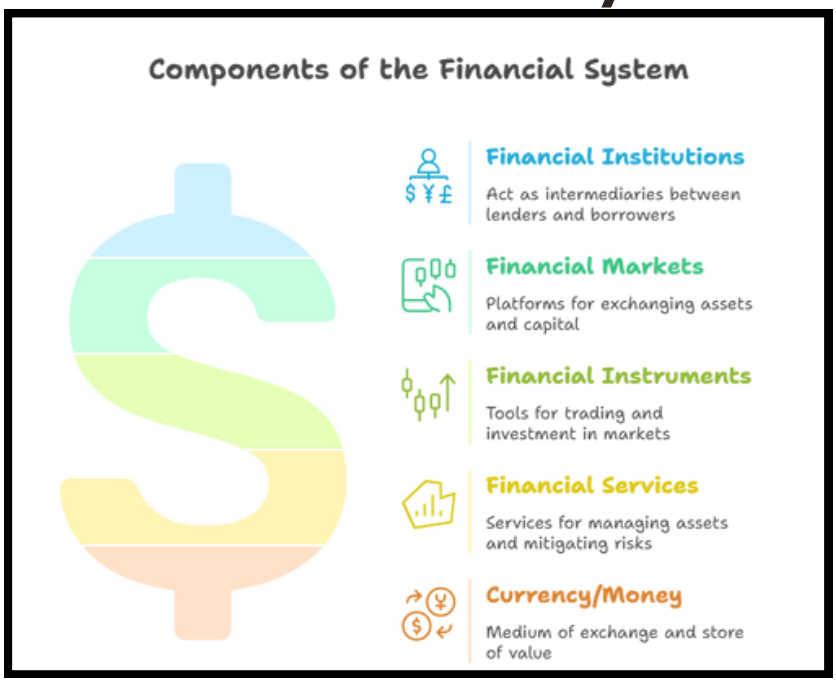


Figure 1.1: Components of the financial system

01 Financial Institutions

Financial institutions act as intermediaries between the lender and the borrower when providing financial services.

Examples:

- Banks (Central and Commercial)
- Insurance Companies
- Investment Companies
- Brokerage Firms

02 Financial Market

These are places where the exchange of assets occurs with borrowers and lenders, such as stocks, bonds, derivatives, and commodities.

Financial markets help businesses to grow and expand by allowing investors to contribute capital. Investors invest in company stock with the expectation of it producing a return in the future. As the business makes a profit, it can then pass on the surplus to the investors.

03 Financial Instruments

Tradable or financial instruments enable individuals to trade within the financial markets.

Examples:

- Shares of stock
- Bonds
- Options
- Futures

04 Financial Services

Financial services provide investors a way of managing assets and offer protection against systemic risk. These also ensure individuals have the appropriate amount of capital in the most efficient investments to promote growth.

Banks, insurance companies, and investment services would be considered financial services.

05 Currency

A currency is a form of payment to exchange products, services, and investments and holds value to society.

Examples:

- US Dollar (USD)
- Euro (EUR)
- British Pound (GBP)
- Japanese Yen (JPY)
- Malaysian Ringgit (MYR)

1.2 Agencies that Facilitate International Flow

Figure 1.2: Agencies that facilitate International flow.

1.2.1 International Monetary Fund (IMF)

PURPOSES

- The IMF was established in 1944 to promote global economic stability and financial cooperation.
- It primarily assists countries facing balance of payments problems by providing short-term financial support and policy advice.

1.2 Agencies that Facilitate International Flow

FUNCTIONS

- Provides loans to countries experiencing economic crises.
- Offers economic surveillance by monitoring global financial stability.
- Provides technical assistance and policy guidance to improve economic management.
- Helps countries stabilize exchange rates and prevent financial crises.

EXAMPLE

If a country faces a currency crisis, the IMF can lend funds to help stabilize its economy, provided the country implements recommended economic reforms.

1.2 Agencies that Facilitate International Flow

1.2.2 World Bank

WORLD BANK GROUP

PURPOSES

The World Bank focuses on long-term economic development and poverty reduction by funding infrastructure projects and development programs in emerging economies.

FUNCTIONS

- Provides low-interest loans and grants for infrastructure, health, and education projects.
- Supports economic reforms to improve governance and reduce poverty.
- Funds large-scale projects such as roads, bridges, and energy development.

EXAMPLE

The World Bank may finance the construction of a hydroelectric power plant in Africa to improve electricity access and economic development.

1.2 Agencies that Facilitate International Flow

1.2.3 International Development Association (IDA)

IDA
International Development Association
WORLD BANK GROUP

PURPOSES

The IDA is a part of the World Bank Group that provides concessional (low-interest or interest-free) loans and grants to the world's poorest countries to support their economic development.

FUNCTIONS

- Offers long-term, low-interest financing to developing nations.
- Focuses on healthcare, education, agriculture, and infrastructure projects.
- Supports countries with high debt burdens by providing debt relief programs.

EXAMPLE

The IDA might fund primary education programs in a low-income country to improve literacy rates and long-term economic prospects.

1.2 Agencies that Facilitate International Flow

1.2.4 International Finance Corporation

IFC
International Finance Corporation
WORLD BANK GROUP

PURPOSES

The IFC is another branch of the World Bank Group that promotes private sector development in developing countries by investing in businesses and industries.

FUNCTIONS

- Provides loans, equity investments, and advisory services to private businesses.
- Helps businesses in developing countries access capital markets.
- Encourages foreign direct investment (FDI) to boost economic growth.
- Supports sustainable development by investing in climate-friendly projects.

EXAMPLE

The IFC might invest in a microfinance bank in India to provide small business loans to entrepreneurs who lack access to traditional banking services.

1.3 Types of Financial Market

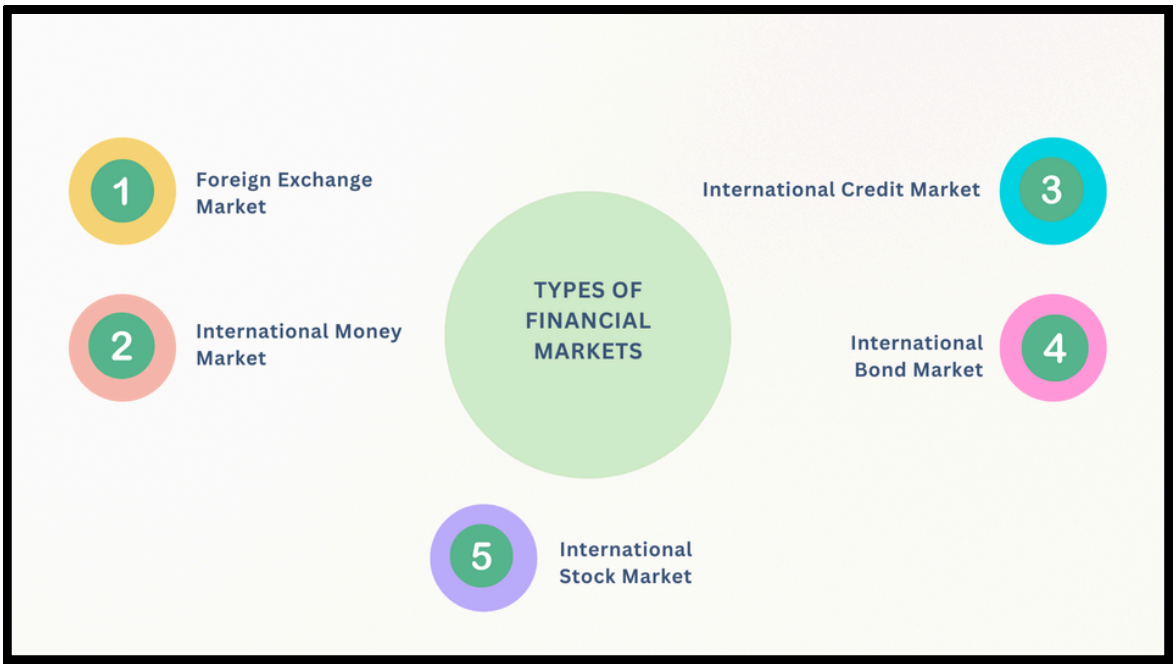


Figure 1.3: Types of financial markets.

1.3.1 Foreign Exchange Market

- The foreign exchange market (Forex or FX) is a global decentralized market where currencies are traded.
- It is the largest and most liquid financial market in the world, operating 24 hours a day across different time zones.
- Participants include banks, financial institutions, governments, corporations, and individual traders.
- The Forex market facilitates international trade and investment by enabling currency conversion and hedging against exchange rate risks.

1.3 Types of Financial Market

1.3.2 International Money Market

- The international money market is a segment of the financial market that deals with short-term borrowing and lending of funds, typically for periods of one year or less.

- It involves instruments such as treasury bills, commercial paper, and certificates of deposit.

- The market provides liquidity to multinational corporations, governments, and financial institutions that need short-term funding.

- Key international money markets include the Eurocurrency market, where deposits in a currency outside its home country are traded (e.g., Eurodollars and Euroyen).

1.3 Types of Financial Market

1.3.3 International Credit Market

- The international credit market facilitates medium- to long-term loans between borrowers and lenders across national borders.
- This market primarily serves businesses, governments, and financial institutions that need funding for capital investments, infrastructure projects, or expansion.
- Loans in this market are often syndicated, meaning multiple lenders collaborate to provide large sums of money to a single borrower.
- Financial institutions such as the World Bank and the International Monetary Fund (IMF) also play a significant role in the international credit market.

1.3 Types of Financial Market

1.3.4 International Bond Market

- The international bond market is a financial market where bonds issued by governments, corporations, or supranational entities are bought and sold across borders.

- These bonds can be categorized into:
  - **Foreign Bonds** – Issued by a foreign entity in a domestic market (e.g., a Japanese company issuing bonds in the U.S.).

  - **Eurobonds** – Bonds issued in a currency different from the country where they are sold (e.g., a U.S. company issuing bonds in Europe denominated in U.S. dollars).

  - **Global Bonds** – Bonds that are issued and traded in multiple markets simultaneously.

- This market provides long-term financing opportunities for entities looking to raise capital beyond their domestic markets.

1.3 Types of Financial Market

1.3.5 International Stock Market

- The international stock market refers to the trading of equity securities (stocks) on exchanges outside a company's home country.

- It allows companies to raise capital from global investors and provides diversification opportunities for investors.

- The international stock market includes:
  - **Major stock exchanges** such as the New York Stock Exchange (NYSE), London Stock Exchange (LSE), Tokyo Stock Exchange (TSE), and Hong Kong Stock Exchange (HKEX).

  - **American Depositary Receipts (ADRs)** – U.S.-traded securities representing shares in foreign companies.

  - **Global Depositary Receipts (GDRs)** – Similar to ADRs but traded in multiple international markets.

  - **Cross-listing** – When a company lists its shares on multiple stock exchanges.

- Investing in international stocks allows investors to participate in the growth of global economies and manage portfolio risks through geographic diversification.

1.3 Types of Financial Market

Differences Between The Types of Financial Market

Type of Market	Main Function	Key Participants	Instruments Traded	Time Horizon
Foreign Exchange Market	Facilitates the conversion of one currency into another for trade and investment	Banks, MNCs, investors, governments, currency traders	Spot contracts, forward contracts, swaps	Short-term (can be instantaneous)
International Money Market	Provides short-term borrowing and lending in global currencies	Banks, corporations, governments	Eurocurrency deposits, certificates of deposit, commercial paper	Very short-term (typically < 1 year)
International Credit Market	Supports medium- to long-term lending across borders	Financial institutions, corporations, international agencies	Loans, syndicated loans, credit lines	Medium to long-term (1–10 years)
International Bond Market	Enables entities to raise capital by issuing bonds in international markets	Governments, corporations, international organizations	Eurobonds, foreign bonds, global bonds	Long-term (5–30 years typically)
International Stock Market	Facilitates buying and selling of equity/shares of companies globally	Investors, companies, stock exchanges	Common and preferred shares, ADRs/GDRs	Medium to long-term (varies)

EXERCISE 1

1. Describe financial system.

2. Examine the purpose of agencies that facilitate international flow below:
   a) International Monetary Fund (IMF)
   b) World Bank
   c) International Development Association (IDA)
   d) International Finance Corporation (IFC)

3. Differenctiate FOUR **(4)** types of financial market below:
   a) International Money Market
   b) International Credit Market
   c) International Bond Market
   d) International Stock Market

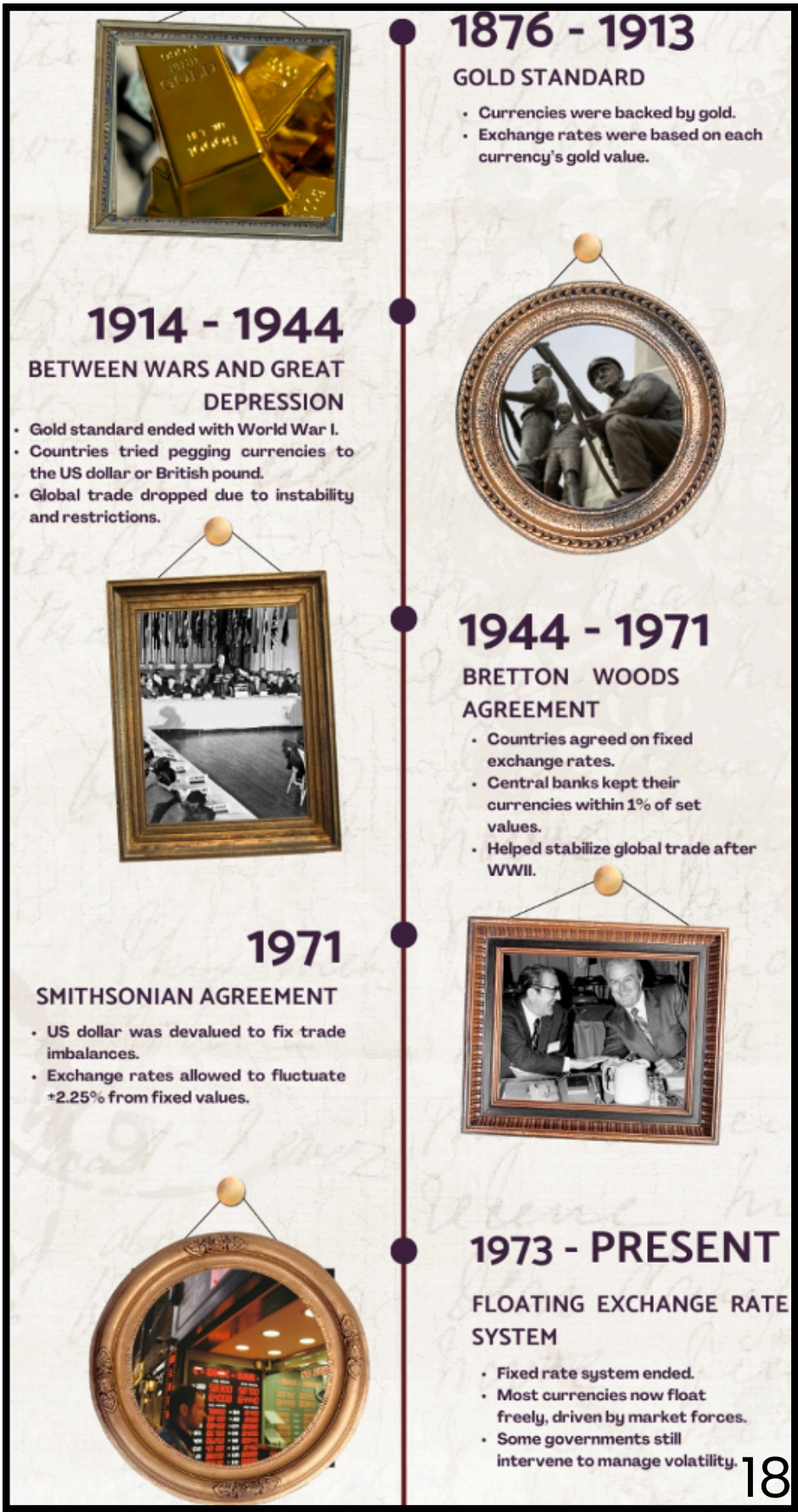
CHAPTER 2

FOREIGN EXCHANGE MARKET

2.1 THE HISTORY OF FOREIGN EXCHANGE MARKET

- The foreign exchange market is one of the original and oldest financial markets in history.

- The system for establishing exchange rates has changed over time. It has evolved from the gold standard to an agreement on fixed exchange rates to a floating rate system.



1.GOLD STANDARD (1876 TO 1913)

- Currencies were directly backed by gold, meaning each unit of currency could be exchanged for a fixed amount of gold.

- Exchange rates were fixed based on how much gold each currency represented.
  - Example: If 1 British Pound (GBP) = 5 ounces of gold and 1 US Dollar (USD) = 1 ounce of gold, then 1 GBP = 5 USD.

- Each country used gold to back its currency.

2. BETWEEN WARS AND GREAT DEPRESSION (1914 – 1944)

- Gold standard was suspended during World War I (1914) due to the U.S. and European banking panic during the Great Depression.

- In the 1930s, countries tried to peg their currency to the US dollar or British pound but there were frequent revisions.

- As a result of instability in the foreign exchange market and the severe restrictions on international transactions during this period, the volume of international trade declined.

3. BRETTON WOODS AGREEMENT (1944 – 1971)

- A global agreement to fix exchange rates between currencies.
- Each currency had a set exchange rate and had to stay within 1% of that rate.
- Central banks (like the U.S. Federal Reserve) had to step in if rates moved too much.
- Helped stabilize currencies and supported international trade.

4. SMITHSONIAN AGREEMENT (1971)

- By 1971, the US dollar was too strong compared to other currencies as the U.S. demand for some foreign currencies was substantially more than the supply of those currencies offered in exchange for dollars.
- Central banks couldn't fix the imbalance in currency demand and supply.
- In Smithsonian Agreement, major countries agreed to:
  1. Reduce (devalue) the US dollar's value.
  2. Allow exchange rates to move 2.25% up or down (wider limits than before)
- Smithsonian Agreement gave currencies more flexibility than under the Bretton Woods system.

5. FLOATING EXCHANGE RATE SYSTEM (1973 – PRESENT)

- In 1973, the official boundaries imposed by the Smithsonian Agreement were eliminated.

- Since that time, the currencies of most countries have been allowed to fluctuate in accordance with market forces.

- However, some countries' central banks still periodically intervene in the foreign exchange market to influence the market-determined exchange rate or to reduce the volatility in their currency's exchange rate movements.

2.2 THE FOREIGN EXCHANGE MARKET

- Each country in the world has its own currency. An important exception is the eurozone, which consists of 19 European countries that adopted the euro as their currency.

- The foreign exchange market allows for the exchange of one currency for another.

- It involves the buying and selling of convertible currencies.

- A forex transaction is a contract whereby two counterparties agree to exchange two currencies at an agreed rate and amount at a specific delivery date.

- In essence, the exchange rate represents the price at which one currency can be purchased with another currency.

- Currencies are traded in pairs:
  For example:
  EUR/USD and USD/JPY: The first currency is the base and the second is the quote currency.

- Participants in these markets can buy, sell, exchange, and speculate on the relative exchange rates of various currency pairs.

- Largest and most liquid market in the world, with trillions of dollars exchanged daily.

- The market is open 24 hours a day, five days a week, across different time zones.

- There is no central exchange or physical location. Trading happens electronically over-the-counter (OTC) through banks, brokers, financial institutions, and individual traders.

The need for Foreign Exchange Market.

1. International trade

- Multinational companies (MNCs) and individuals who engage in international transactions commonly need to exchange their local currency for a foreign currency or vice versa.

For example:

- Some MNCs based in the United States exchange dollars for Mexican pesos when they purchase supplies in Mexico that are denominated in pesos, or exchange them for euros when they purchase supplies from Italy that are denominated in euros.

- Other MNCs based in the United States receive Japanese yen when selling products to Japan and may wish to convert those yen to dollars.

2. Tourism and Travel

- Individuals rely on the foreign exchange market when they travel to foreign countries.

For example:

- People from the United States exchange dollars for Mexican pesos when they visit Mexico

- People from the United States exchange dollars for euros when they visit Italy

- People from the United States exchange dollars for Japanese yen when they visit Japan.

3. Speculation and Profit Opportunities

- In addition, some individuals and financial institutions speculate in the foreign exchange market by exchanging their local currency for a foreign currency that they believe will increase in value over time.

For example:

- An investor believes that the Euro (EUR) will strengthen against the U.S. Dollar (USD).

- They buy EUR/USD at 1.08 and later sell it at 1.12, earning a 3.7% profit from the change in exchange rate.

4. Global Investment

- Large commercial banks serve this market by holding inventories of each currency so that they can accommodate requests by individuals or MNCs for currency for various purposes. Investors buy assets such as stocks, bonds, real estate in different countries need to exchange currencies to invest in foreign countries.

For example:

- A U.S. investor buying stocks in Europe must exchange USD to EUR.

Forex Trading

- Currency Pairs: Currencies are traded in pairs (eamples: EUR/USD, USD/JPY).
  - The first currency (base) is the one being bought.
  - The second currency (quote) is the one being sold.

- Exchange Rate: The price of one currency in terms of another

For example:

EUR/USD = 1.10

It means, 1 Euro = 1.10 US Dollars

- Bid & Ask Prices:
  - Bid: The price buyers are willing to pay.
  - Ask: The price sellers are willing to accept.
  - Spread: Difference between bid and ask (transaction cost)

2.3 THE MAJOR PLAYER IN FOREIGN EXCHANGE MARKET

- Each country in the world has its own currency. An important exception is the eurozone, which consists of 19 European countries that adopted the euro as their currency.
- The foreign exchange market allows for the exchange of one currency for another.
- It involves the buying and selling of convertible currencies.
- A forex transaction is a contract whereby two counterparties agree to exchange two currencies at an agreed rate and amount at a specific delivery date.
- In essence, the exchange rate represents the price at which one currency can be purchased with another currency.

2.3 THE MAJOR PLAYER IN FOREIGN EXCHANGE MARKET

1. Corporates (Multinational Companies - MNCs)

- Malaysian firms engaged in international trade (exports/imports) need foreign exchange market for transactions.
- They hedge currency risks using forwards, derivatives, and options.

Examples:

- Petronas pays for oil and gas imports in USD and earns revenue in multiple currencies.
- Sime Darby Plantation exports palm oil which deals in USD, EUR, CNY.
- Top Glove is the rubber glove exporter which receives USD revenues.

2. Commercial Banks

- Commercial Banks are the major players in the market.
- Facilitate forex transactions for clients (corporates, individuals).
- Trade in the interbank market and provide exchange rate quotes.

Examples:

- Maybank
- CIMB Bank
- Public Bank
- RHB Bank

3. Exchange Brokers

- Match forex buyers & sellers which consist of banks and institutions.
- In the absence of exchange brokers, banks have to contact each other for quotes. If there are 150 banks at a centre, for obtaining the best quote for a single currency, a dealer may have to contact 149 banks.
- Exchange brokers ensure that the most favorable quotation is obtained and at low cost in terms of time and money.
- Exchange brokers provide anonymous trading platforms to ensure fair pricing.
- The bank may leave with the broker the limit up to which and the rate at which it wishes to buy or sell the foreign currency concerned. From the intends from other banks, the broker will be able to match the requirements of both. The names of the counter parities are revealed to the banks only when the deal is acceptable to them.

Examples:

- Bursa Malaysia Derivatives
- Pepperstone
- FXTM

4. Central Banks

- Central Banks intervene in the market to stabilize or influence their currency's value, manage foreign reserves and set interest rates.

- Central banks intervene in the forex market to control the value of their currency, especially if it becomes too strong or too weak. This helps maintain price stability and protect export competitiveness.

- Central banks hold foreign currency reserves (examples: USD, EUR, JPY) to use during currency interventions.

- Central banks use interest rate adjustments to influence currency value. A higher interest rate tends to attract foreign investors, which increases demand for the local currency.

Example:

- Bank Negara Malaysia

- U.S. Federal Reserve

- The Swiss National Bank (SNB) intervenes to weaken the Swiss Franc (CHF) because a strong CHF hurts Swiss exports. So the SNB sells CHF and buys foreign currencies (EUR/USD) to increase CHF supply.

2.4 THE TYPES OF FOREIGN EXCHANGE MARKET

1. Spot Market

- The common types of foreign exchange transactions is the spot market, which involves the immediate exchange of currencies.
- The most common type of foreign exchange transaction is for immediate exchange known as the spot market.
- The rate at which two currencies are exchanged in the spot market is called the spot exchange rate.
- Spot market deals are usually executed electronically through banks or financial institutions acting as intermediaries.
- The traders in the spot market are not exposed to the uncertainty of the market, which can lead to an increase or decline in the price between the agreement and trade.
- A currency's liquidity affects the ease with which it can be bought or sold.

Example:

- A tourist from Malaysia arrives in London and wants to convert RM5,000 into British Pounds (GBP).
- She goes to a money changer and exchanges her money at the current rate of 1 GBP = RM6.000, receiving GBP 833.33 on the spot.

2. Forward Market

- The forward market is the market in which forward contracts are traded.
- A currency forward is a customized, written contract between parties that sets a fixed foreign currency exchange rate for a transaction that will occur on a specified future date.
- The future date for which the currency exchange rate is fixed. It is usually the date on which the two parties plan to conclude a buy/sell transaction of goods.
- The forward rate is the exchange rate, specified in the forward contract, at which the currencies will be exchanged.
- Currency forward contracts are used to hedge foreign currency exchange risk. It protects the buyer or seller against unfavorable currency exchange rate occurrences that may arise between when a sale is contracted and when the sale is actually made.

Example:

- A Malaysian company agrees to pay a U.S. supplier USD 100,000 in 3 months.
- To avoid the risk of the U.S. dollar becoming more expensive, the company enters into a forward contract with a bank to lock in the rate at 1 USD = RM4.70.
- In 3 months, the company will pay RM470,000, no matter what the actual rate is.

3. Options Market

- Currency options contracts can be classified as calls or puts.

- A currency call option provides the right to buy a specific currency at a specific price (called the strike price or exercise price) within a specific period. It is used to hedge future payables.

- A currency put option provides the right to sell a specific currency at a specific price within a specific period of time. It is used to hedge future receivables.

- The purpose of option is:
  * To hedge foreign exchange risk
  * To make profit from unfavorable exchange rate changes (normally speculators)

- Currency call and put options can be purchased on an exchange.

- Options market offer more flexibility than forward or futures contracts because they are not obligations. The firm can elect not to exercise the option.

- Currency options have become a popular means of hedging.

Example:

A Malaysian exporter expects to receive USD 50,000 in 2 months but is worried the U.S. dollar might fall. He buys a put option to sell USD at RM4.75.

- If the exchange rate falls to RM4.60, he uses the option and sells at RM4.75 (better deal).

- If the rate rises to RM4.85, he ignores the option and sells at the higher market rate.

4. Futures Market

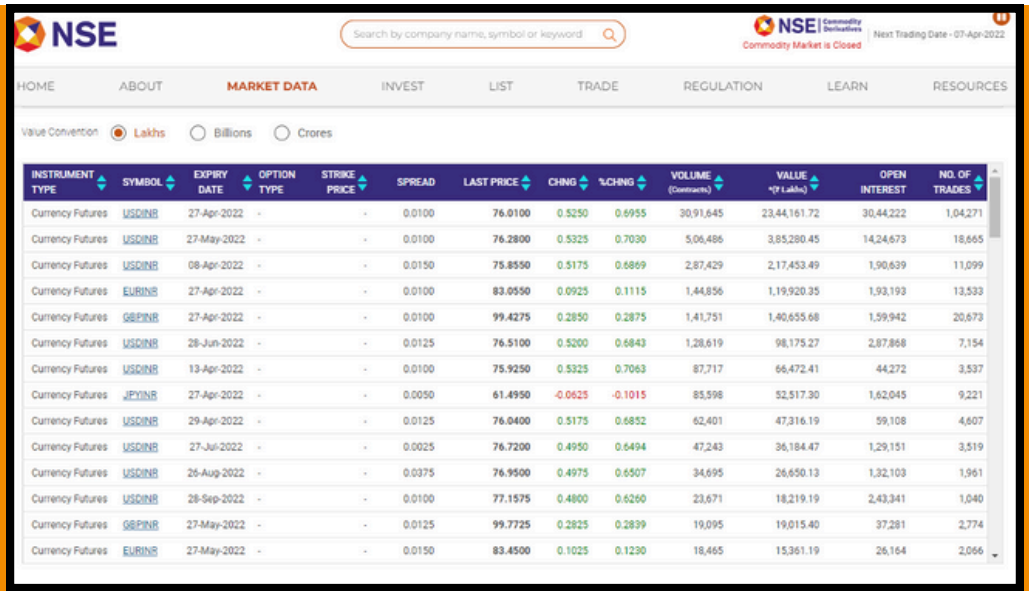
- In the futures market, buyers and sellers agree to trade a specific amount of currency at a fixed price on a set future date.

- These contracts are standardized and traded on organized exchanges like the Chicago Mercantile Exchange (CME).

- The contract are standards in terms of:
  * Fixed Contract Size - The amount of currency or asset is predetermined (example: Euro futures contract = €125,000)
  * Set Expiry Dates - Contracts expire on fixed future dates (example: the third Wednesday of March, June, September, December).
  * Standard Currencies - only specific, commonly traded currencies are available (example: USD, EUR, GBP, JPY)
  * Traded on Organized Exchanges - These contracts are traded on regulated platforms like the Chicago Mercantile Exchange (CME) or Intercontinental Exchange (ICE).
  * No Customization - the contract terms like amount or date cannot be change and need to choose from the available standard options.

- Businesses use the futures market to protect (hedge) against future currency fluctuations. While traders/investors use it to speculate and profit from expected changes in exchange rates.

- Unlike forward contracts, futures are traded on a regulated exchange, which provides transparency, liquidity, and reduced counterparty risk (risk that the other party in a financial contract will fail to fulfill their obligation).



INSTRUMENT TYPE	SYMBOL	EXPIRY DATE	OPTION TYPE	STRIKE PRICE	SPREAD	LAST PRICE	CHNG	%CHNG	VOLUME (Contracts)	VALUE (₹ Lakhs)	OPEN INTEREST	NO. OF TRADES
Currency Futures	USDINR	27-Apr-2022	-	-	0.0100	76.0100	0.5250	0.6955	30,91,645	23,44,161.72	30,44,222	1,04,271
Currency Futures	USDINR	27-May-2022	-	-	0.0100	76.2800	0.5325	0.7030	5,06,486	3,85,280.45	14,24,673	18,665
Currency Futures	USDINR	08-Apr-2022	-	-	0.0150	75.8550	0.5175	0.6869	2,87,429	2,17,453.49	1,90,639	11,099
Currency Futures	EURINR	27-Apr-2022	-	-	0.0100	83.0550	0.0925	0.1115	1,44,856	1,19,920.35	1,93,193	13,533
Currency Futures	GBPINR	27-Apr-2022	-	-	0.0100	99.4275	0.2850	0.2875	1,41,751	1,40,655.68	1,59,942	20,673
Currency Futures	USDINR	28-Jun-2022	-	-	0.0125	76.5100	0.5200	0.6843	1,28,619	98,175.27	2,87,868	7,154
Currency Futures	USDINR	13-Apr-2022	-	-	0.0100	75.9250	0.5325	0.7063	87,717	66,472.41	44,272	3,537
Currency Futures	JPYINR	27-Apr-2022	-	-	0.0050	61.4950	-0.0625	-0.1015	85,598	52,517.30	1,62,045	9,221
Currency Futures	USDINR	29-Apr-2022	-	-	0.0125	76.0400	0.5175	0.6852	62,401	47,316.19	59,108	4,607
Currency Futures	USDINR	27-Jul-2022	-	-	0.0025	76.7200	0.4950	0.6494	47,243	36,184.47	1,29,151	3,519
Currency Futures	USDINR	26-Aug-2022	-	-	0.0375	76.9500	0.4975	0.6507	34,695	26,650.13	1,32,103	1,961
Currency Futures	USDINR	28-Sep-2022	-	-	0.0100	77.1575	0.4800	0.6260	23,671	18,219.19	2,43,341	1,040
Currency Futures	GBPINR	27-May-2022	-	-	0.0125	99.7725	0.2825	0.2839	19,095	19,015.40	37,281	2,774
Currency Futures	EURINR	27-May-2022	-	-	0.0150	83.4500	0.1025	0.1230	18,465	15,361.19	26,164	2,066

- Traders must deposit a margin (initial deposit).

- Contracts are marked-to-market daily, meaning gains or losses are settled at the end of each trading day.

- Unlike options, futures oblige the buyer/seller to complete the transaction unless the contract is sold before it matures.

Example:

- A trader buys a Euro futures contract to buy EUR at 1.10 USD in 3 months. If the Euro rises to 1.15 USD, the trader profits from the price difference.

Differences Between The Foreign Exchange Market

Market Type	Used By	Key Feature	Example
Spot Market	Tourists, banks	Immediate exchange at	Tourist exchanges MYR to GBP at
Forward Market	Businesses	Locked-in rate for future exchange	Company locks rate to pay U.S.
Futures Market	Traders, investors	Standardized contracts on	Trader bets Euro will rise by buying
Options Market	Exporters, investors	Right (not obligation) to	Exporter protects USD value by

2.5 THE FOREIGN EXCHANGE QUOTATIONS

- A foreign exchange (forex) quote represents the price at which a market participant is ready to buy or sell a currency pair.
- These rates are continuously adjusted in real time due to fluctuations in the forex market.
- Under normal conditions, exchange rates for any two currencies remain consistent across different banks and financial institutions offering forex services.
- If a significant pricing gap arises, traders (including other banks) can exploit the difference by buying the currency from the bank offering the lower rate and selling it to the one quoting a higher rate.
- These actions would cause the bank offering the lower rate to experience a shortage of that currency, while the bank with the higher rate would experience surplus amount of that currency.

2.5.1 THE CALCULATION OF FOREIGN EXCHANGE QUOTATIONS

1. Direct Quotation

- A direct quotation is a home currency price of a unit of foreign currency.

Example:

- The US (home country) and Mexico is: $0.1050/Peso

- Malaysia (home country) and US is: RM3.9710/US$

Calculation:

Example 1:

- The indirect quote for the euro is $0.80, so the direct quote is:

  Solution:
  Direct quote = 1 ÷ Indirect quote
  = 1 ÷ $0.80
  = $1.25

- This is a direct quote because it represents the value of the foreign currency in dollars. The spot rate of the euro is quoted at $1.25.

2. Indirect Quotation

An indirect quotation is a foreign currency price of a unit of home currency.

Example:
- China (home country) and Japan is: ¥15.75/Rmb
- UK (home country) and Malaysia is: RM0.1780/GBP

Calculation:

Example 1:
The spot rate of the euro is quoted at $1.25 (direct quote). What is the indirect quote?

Solution:
The indirect quote of the euro is the reciprocal of the direct quote:
Indirect quote = 1 ÷ Direct quote
= 1 ÷ $1.25
= 0.80 euro

3. Cross Quotation

- A cross rate refers to the exchange rate between two foreign currencies that excludes the local (domestic) currency, and is usually derived using a third currency, most commonly the US dollar (USD).

- This method is applied when there's no direct quotation between two currencies, so their rates are determined by using a common currency, often USD.

- Cross rates are particularly helpful when dealing with currency pairs that are not frequently traded.

- For example, to calculate the EUR/JPY rate, one can use the existing rates of EUR/USD and USD/JPY.

Example:

CAD/MYR	3.0649 (1CAD = 3.0649MYR)
SGD/MYR	2.2523 (1SGD = 2.2523MYR)
MYR/SGD	0.4440 (1 MYR = 0.4440SGD)
GBP/MYR	6.8306 (1 GBP = 6.8306 MYR)
AUD/MYR	2.8311 (1 AUD = 2.8311 MYR)
AUD/JPY	98.91 (1 AUD = 98.91 JPY)
JPY/IDR	75.90 (1 JPY= 75.90IDR)

- Cross quotation can be calculated using:

1) Mathematical equation

2) Formula:

$$\frac{A}{C} = \frac{A}{B} X \frac{B}{C}$$

Where,
A/C = units of currency A per unit of currency C
A/B = units of currency A per unit of currency B
B/C = units of currency B per unit of currency C

1. Mathematical Equation

Example 1:

Based on the foreign exchange rate provided below:

1USD = 1.6602SGD
1USD = 1.7890GBP

Calculate the GBP to SGD rate

Solution:

1.7890 GBP = 1 USD = 1.6602 SGD
1.7890 GBP = 1.6602 SGD

$$1\text{GBP} = \frac{1.6602}{1.7890}\ \text{SGD}$$

1GBP = 0.9280 SGD

Example 2:

On 20 November 2025, the exchange rate between Euro and US dollar is 0.85€ per US$. Exchange rate between US$ and Swiss Franc is 1.26 US$ per Swiss Franc. Calculate the exchange rate between € and Swiss Franc in € per Swiss Franc.

Solution:

1 USD = 0.85 EURO
1 SF = 1.26 USD
1 SF = ? EURO
1 SF = 1.26 USD
1 USD = 1 ÷ 1.26 SF
= 0.7936 SF

0.7936 SF = 0.85 EURO
1SF = 0.85 ÷ 0.7936 EURO
= 1.0710EURO

2. Formula

Example 1:

On 15 September 2025, the exchange rate between Euro and US dollar is 0.85€ per US$. Exchange rate between US$ and Swiss Franc is 1.26 US$ per Swiss Franc. Calculate the exchange rate between € and Swiss Franc in € per Swiss Franc.

Solution:

$$\frac{A}{C} = \frac{A}{B} X \frac{B}{C}$$

Euro / Swiss Franc = (0.85 Euro / USD) × (1.26 USD/ Swiss Franc)
= 1.0710

EXERCISE 2

1

Describe **TWO (2)** types of foreign exchange market.

2

Assume the following US Dollar exchange rates for the Canadian Dollar and New Zealand Dollar:

USD 1.00 = CAD 1.3500
NZD 1.00 = USD 0.6090

Convert the exchange rate above to the cross rate of:

i) CAD per NZD
ii) NZD per CAD

3

Calculate the foreign exchange rate per EUR based on the given data:

i) USD / EUR = 1.0925

ii) GBP / EUR = 0.8563

iii) JPY / EUR = 0.0069

iv) CAD / EUR = 1.4827

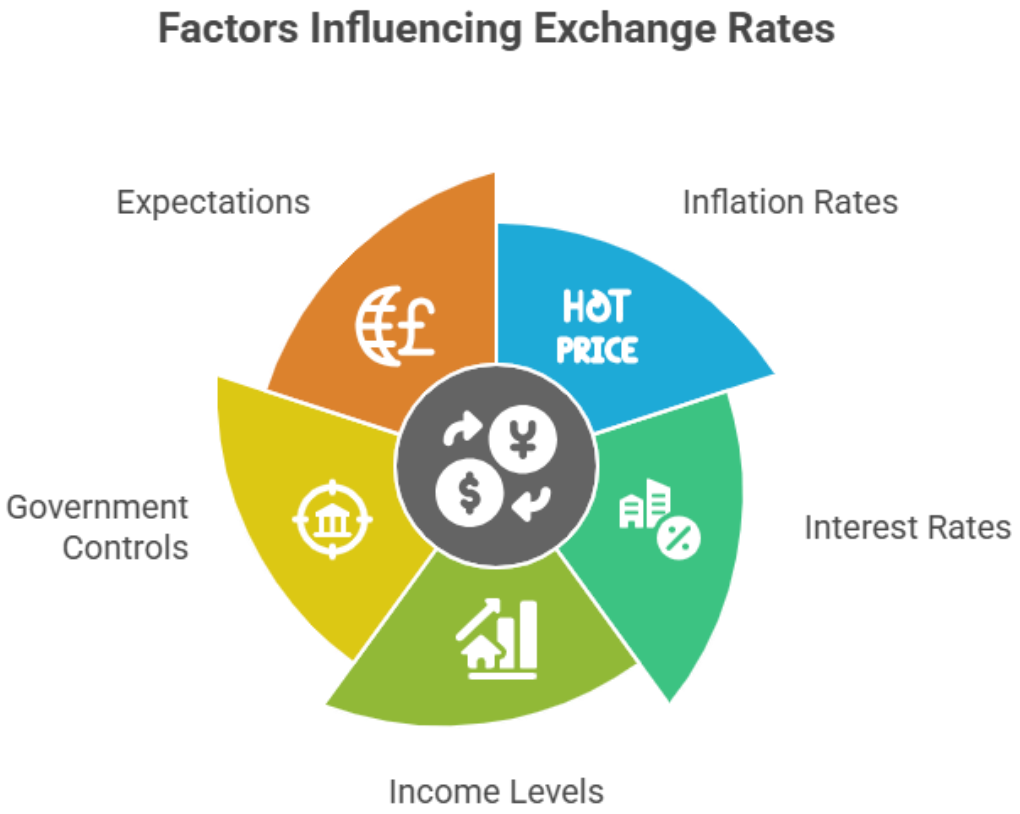
v) 100 MXN / EUR = 5.2371

CHAPTER 3

EXCHANGE RATE DETERMINANTS AND FORECASTING

3.1 Major Determinants of Exchange Rates

- Exchange rates are influenced by a wide range of economic and financial variables. These determinants affect the demand and supply of currencies in the foreign exchange market, thereby shaping whether a currency appreciates or depreciates. Understanding these determinants is crucial in analyzing international financial flows, forecasting exchange rate movements, and developing government policy.
- The major determinants of exchange rates include:
  - Inflation rates
  - Interest rates
  - Income levels
  - Government controls
  - Expectations



3.1 Major Determinants of Exchange Rates

(a) Inflation Rates

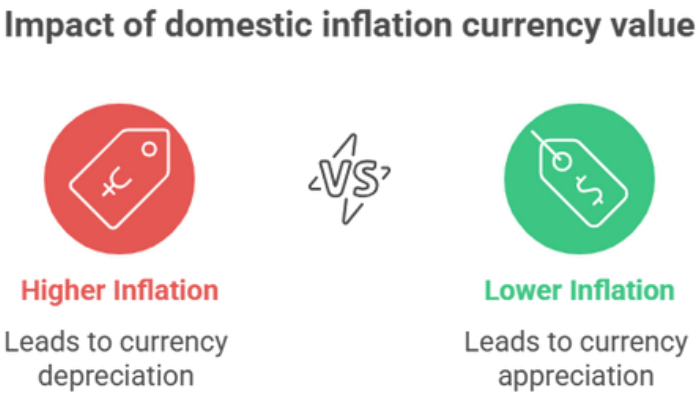
- Inflation refers to a continuous rise in the general price level of goods and services in a country. It reduces the purchasing power of money and affects international trade competitiveness. The rate of inflation influences exchange rate movements because it changes the relative cost of goods and services between countries.
- Inflation arises when total demand grows faster than supply, when production costs rise, or when the money supply expands excessively.

EFFECT OF HIGH INFLATION ON CURRENCY VALUE

- When a country experiences high inflation, its goods and services become more expensive compared to those from other countries.
- As a result:
  - Domestic consumers buy more imported products since they are relatively cheaper.
  - The demand for foreign currency increases.
  - Foreign buyers find the country's exports less attractive, which lowers demand for the domestic currency.
  - Overall, the domestic currency depreciates.

EFFECT OF LOW INFLATION ON CURRENCY VALUE

- When a country has low inflation, local products remain more competitive internationally:
  - Foreign consumers buy more exports.
  - Domestic buyers reduce imports.
  - The demand for domestic currency increases, leading to appreciation.



3.1 Major Determinants of Exchange Rates

MAIN TYPES OF INFLATION

Demand-Pull Inflation

- Demand-pull inflation occurs when total spending in an economy rises faster than its ability to produce goods and services.
- In simple terms, it means too much money chasing too few goods.
- As consumers, businesses, and the government spend more, supply cannot keep up, and prices begin to rise across the economy.
- This typically occurs during periods of rapid growth, when people feel confident, jobs increase, and incomes rise — leading to greater purchasing power.
- The overall effect is a general rise in prices across sectors such as housing, construction, transport, and consumer goods.

EXAMPLE

- When the Malaysian government launches large-scale infrastructure projects — such as new expressways, schools, and hospital upgrades — contractors and suppliers experience surging orders.
- Workers receive higher incomes and begin spending more on homes, vehicles, and household goods.
- As retailers and service providers struggle to keep up, they raise prices to balance the growing demand.
- Over time, this sustained spending pattern pushes up prices throughout the economy, resulting in demand-pull inflation.
- In the foreign exchange market, this rise in domestic spending reduces export competitiveness while increasing import demand.
- As a result, more foreign currency is needed to pay for imported goods and services, causing the ringgit to depreciate against major currencies such as the U.S. dollar or Singapore dollar.

3.1 Major Determinants of Exchange Rates

MAIN TYPES OF INFLATION

Cost-Push Inflation

- Cost-push inflation happens when the cost of producing goods and services increases, forcing businesses to raise prices to maintain profit margins.
- Even if overall demand stays the same, higher costs for raw materials, wages, or energy cause general price increases in the economy.
- This type of inflation is often triggered by supply-side factors such as oil price shocks, rising transportation charges, or higher import costs.
- Businesses respond by cutting output or transferring the higher cost to consumers through price adjustments.

EXAMPLE

- When global oil prices surge, transportation and electricity costs in Malaysia rise sharply.
- Farmers, manufacturers, and retailers face higher delivery expenses and energy bills, so the prices of vegetables, furniture, and packaged food increase.
- Consumers pay more not because they buy more, but because producing and moving goods has become more expensive.
- In the foreign exchange market, sustained cost-push inflation reduces export competitiveness.
- Higher domestic prices make Malaysian goods less attractive abroad, leading to weaker demand for the ringgit.

3.1 Major Determinants of Exchange Rates

MAIN TYPES OF INFLATION

Imported Inflation

- Imported inflation occurs when the prices of imported goods and raw materials increase, or when the domestic currency weakens against foreign currencies.
- A weaker currency makes imports more expensive in local currency terms, even if foreign prices remain stable.
- This type of inflation is common in countries that depend heavily on imported fuel, food, and machinery.
- Rising import prices quickly spread through the supply chain and lift overall living costs.

EXAMPLE

- When the ringgit depreciates from RM4.20 to RM4.80 per U.S. dollar, Malaysia must pay more for imported wheat, petroleum, and fertilizers.
- Bakeries, transport companies, and farmers face higher input costs, so bread, fuel, and vegetables all become more expensive.
- The cycle can reinforce itself: a weaker currency causes higher import costs, which raise domestic prices, further eroding investor confidence and pushing the ringgit down again.

3.1 Major Determinants of Exchange Rates

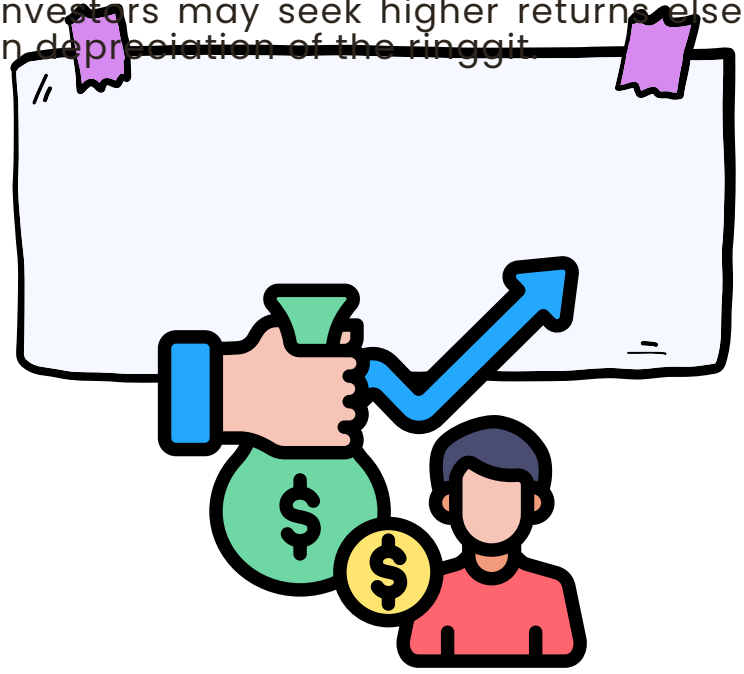
MAIN TYPES OF INFLATION

Monetary Inflation

- Monetary inflation arises when the money supply expands faster than the production of goods and services.
- When people and businesses have more money to spend but the economy cannot produce more goods, prices rise across all sectors.
- This can result from prolonged low interest rates or expansionary policies designed to stimulate growth.
- Initially, spending increases, but over time, too much liquidity in the system leads to overheating and broad-based inflation.

EXAMPLE

- If Bank Negara Malaysia keeps interest rates low for an extended period, banks issue more loans for houses, cars, and business expansion.
- As buyers compete for limited supply, developers and retailers raise prices.
- Eventually, the excess money in circulation causes a general increase in prices for goods and services.
- In the foreign exchange market, the oversupply of money weakens the currency's external value.
- Investors may seek higher returns elsewhere, resulting in depreciation of the ringgit.



3.1 Major Determinants of Exchange Rates

MAIN TYPES OF INFLATION

Structural or Policy Inflation

- Structural or policy inflation occurs when inefficiencies or government policy changes raise costs throughout the economy, even without an increase in demand.
- It develops slowly but tends to persist because it comes from institutional or regulatory factors.
- Common causes include poor logistics, monopoly pricing, subsidy removal, or new taxes.
- These changes affect production costs across multiple industries and make goods permanently more expensive.

EXAMPLE

- When the government reduces fuel or electricity subsidies, transport operators and manufacturers face higher operating costs.
- Retailers pass these increases to consumers, and prices of food, household items, and building materials all rise.
- The overall effect is a steady, long-term increase in living costs.
- Over time, sustained structural inflation can reduce investor confidence and limit export competitiveness, gradually weakening the ringgit in global markets.

3.1 Major Determinants of Exchange Rates

(b) Interest Rates

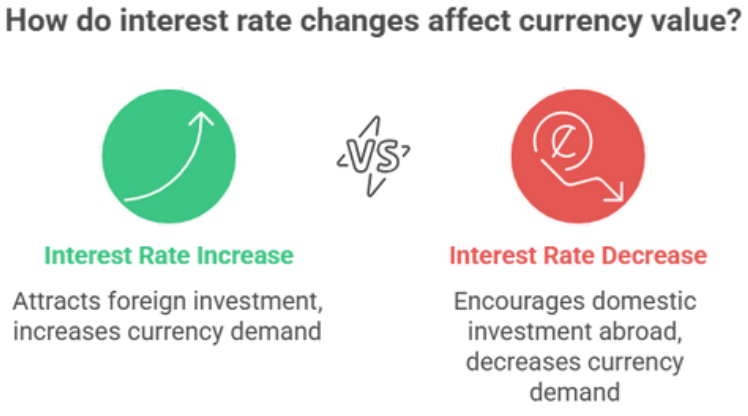
- Interest rate refers to the cost of borrowing money or the reward for saving and investing.
- It plays a key role in influencing capital flows and exchange rate movements.
- Changes in interest rates affect the demand for a country's currency because investors seek higher returns.

WHEN INTEREST RATE INCREASES

- Foreign investors move funds into the country to gain from higher returns.
- Demand for the domestic currency increases.
- The currency appreciates in value.
- Example:
  - If Bank Negara Malaysia raises its policy rate above regional levels, global investors shift funds into Malaysian bonds and deposits.
  - This increases demand for the ringgit, causing the MYR to strengthen temporarily.

WHEN INTEREST RATE DECREASES

- Domestic investors look abroad for better returns.
- Foreign capital outflows increase.
- Demand for foreign currency rises.
- The domestic currency depreciates.
- Example:
  - If interest rates in Malaysia fall below Singapore's, Malaysian investors may move funds into Singaporean assets.
  - Demand for SGD rises, leading to a weaker ringgit.



3.1 Major Determinants of Exchange Rates

(c) Income Level

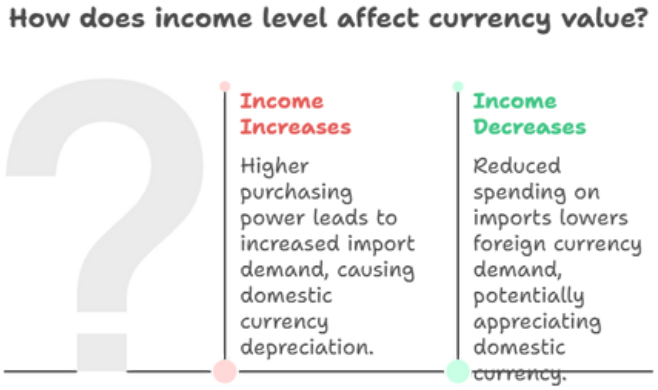
- Income level refers to the average earnings of individuals and households within a country.
- Changes in income affect consumption patterns, especially spending on imported goods and services.
- When people earn more, they tend to spend more — including on foreign products — which influences the demand for currencies.

WHEN INCOME LEVEL INCREASES

- Consumers have higher purchasing power and spend more on both local and imported goods.
- Demand for foreign goods increases → demand for foreign currency rises.
- The domestic currency tends to depreciate because more foreign currency is needed for imports.
- Example:
  - During periods of strong economic growth in Malaysia, higher household income encourages people to buy imported cars, branded clothing, and foreign travel packages.
  - This higher import demand increases the need for USD, JPY, or EUR, leading to downward pressure on the ringgit.

WHEN INCOME LEVEL DECREASES

- Consumers reduce spending, especially on imported items.
- Demand for foreign currency falls.
- The domestic currency may appreciate slightly due to lower import activity.
- Example:
  - In a slow economic period, Malaysians cut back on overseas travel and imported goods.
  - Lower import demand means fewer USD are needed, which can help stabilize or slightly strengthen the ringgit.



3.1 Major Determinants of Exchange Rates

(d) Government Controls

- Government controls refer to policies, regulations, or actions taken by a country to influence trade, investment, and currency stability.
- These measures can directly or indirectly affect the demand and supply of foreign exchange.
- The goal is often to maintain economic stability, protect industries, or prevent excessive currency fluctuations..

TYPES OF GOVERNMENT CONTROLS

Foreign Exchange Regulations	Limit or regulate the buying and selling of foreign currencies to protect reserves and control capital movement.
Trade Policies and Tariffs	Imposing import duties or export incentives affects trade volume and therefore currency flow.
Monetary and Fiscal Policies	Adjusting interest rates, taxes, and government spending influences inflation, capital flow, and exchange rate trends.
Central Bank Intervention	Buying or selling domestic currency to control exchange rate movements.

3.1 Major Determinants of Exchange Rates

(e) Expectations

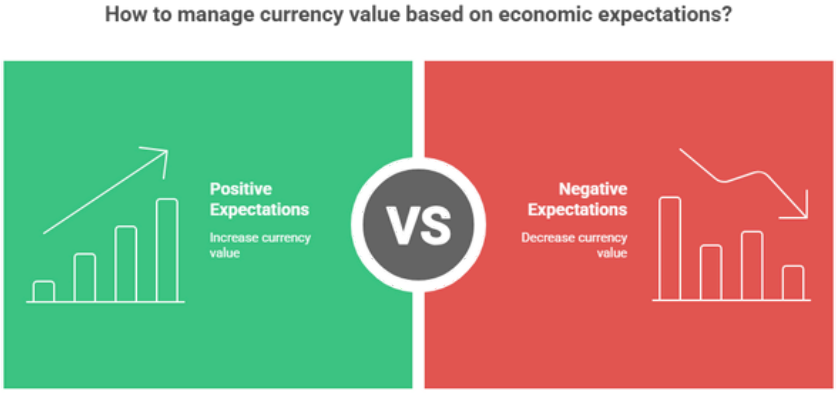
- Expectations refer to how investors, businesses, and consumers anticipate future economic or political conditions.
- Their beliefs about what will happen — such as inflation, interest rates, or government policy — can influence how currencies are bought and sold in advance.
- Because markets react to perception as much as reality, expectations can cause immediate changes in exchange rates, even before actual events occur.

POSITIVE EXPECTATIONS

- When people expect a country's economy to grow or remain stable, confidence in that currency increases.
- Investors buy more domestic assets and hold more of the currency.
- Demand for the currency rises → appreciation.

NEGATIVE EXPECTATIONS

- When people expect inflation, political instability, or policy uncertainty, they shift funds to safer currencies.
- Demand for the domestic currency falls → depreciation.



3.2 Equilibrium Exchange Rate and Its Movement

The equilibrium exchange rate (EER) is the rate at which the demand for a currency equals its supply in the foreign exchange market.
At this level, there is no shortage or surplus of currency, and the exchange rate remains stable — unless new economic or financial developments cause shifts in demand or supply.
The balance of demand and supply in the foreign exchange market determines how the currency moves.
To understand this, it's important to look at where these two forces come from.

Key factor influencing equilibrium exchange rate (EER)

Demand for Currency

Supply of Currency

3.2 Equilibrium Exchange Rate and Its Movement

DEMAND FOR CURRENCY

- The demand for a currency originates from foreign buyers who need that currency to make payments for goods, services, or investments in the domestic economy.
- Foreign investors and importers will buy the local currency when they:
  - Purchase domestic goods and services (exports)
  - Invest in domestic financial assets such as shares, bonds, or property
  - Repay loans or remit profits earned from local operations
  - When exports increase or foreign investment grows, the demand for the domestic currency rises, strengthening its value in the market.
- Example:
  - When foreign tourists visit Malaysia and spend in ringgit, they exchange their foreign money for MYR — creating additional demand for the ringgit and putting upward pressure on its value.

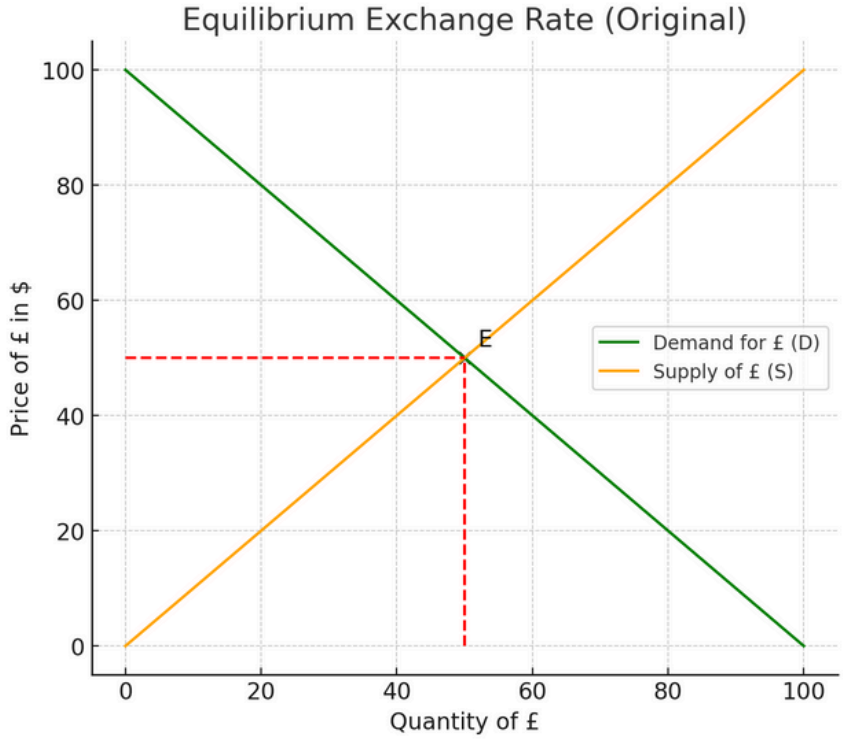
SUPPLY OF CURRENCY

- The supply of a currency comes from domestic residents who need foreign money to pay for imports or other overseas activities.
- They sell their local currency in exchange for foreign currency to:
  - Import goods and services
  - Invest abroad or repay foreign loans
  - Travel or study in other countries
  - As imports and foreign investments increase, the supply of domestic currency in the forex market also rises, which may cause the currency to depreciate.
- Example:
  - When Malaysians import electronics from Japan, they sell ringgit to buy yen.
  - This increases the supply of MYR in the forex market and can lead to a slight weakening of the ringgit if demand does not match supply.

3.2 Equilibrium Exchange Rate and Its Movement

DETERMINING THE EQUILIBRIUM EXCHANGE RATE

- The equilibrium exchange rate (EER) is established at the point where the demand for a currency equals its supply in the foreign exchange market.
- At this level, the quantity of currency that foreign buyers want to purchase matches exactly the amount that domestic residents want to sell.
- If the exchange rate is above equilibrium, there is excess supply of the domestic currency — more people want to sell it than buy it.
- This pushes the exchange rate downward until balance is restored.
- If the exchange rate is below equilibrium, there is excess demand for the domestic currency — more people want to buy it than sell it.
- This causes the exchange rate to rise until demand equals supply again.



(Graph: D ↓ slope, S ↑ slope, meeting at E)

3.2 Equilibrium Exchange Rate and Its Movement

MOVEMENT OF THE EQUILIBRIUM EXCHANGE RATE

- The equilibrium rate is not fixed; it changes over time due to shifts in economic activity, investor sentiment, and trade performance.
- Any change in the demand or supply of currency will move the equilibrium rate to a new level.

Increase in Demand for Currency	More exports or foreign investment → Currency appreciates.
Decrease in Demand for Currency	Lower exports or reduced capital inflow → Currency depreciates.
Increase in Supply of Currency	More imports or outward investment → Currency depreciates.
Decrease in Supply of Currency	Fewer imports or less capital outflow → Currency appreciates.

3.2 Equilibrium Exchange Rate and Its Movement

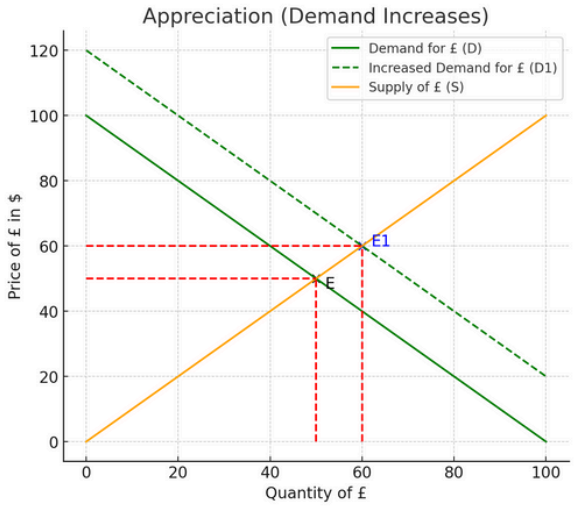
MOVEMENT OF THE EQUILIBRIUM EXCHANGE RATE

Increase in Demand for Currency

- Demand Increases ($D \rightarrow D_1$)
- Caused by higher exports, stronger foreign investment, or increased tourism receipts.
- More foreigners buy the domestic currency → demand curve shifts right.
- New equilibrium occurs at a higher exchange rate → domestic currency appreciates.

EXAMPLE

- A country exports more oil.
- Foreign buyers need local currency to pay for oil purchases.
- The increased demand shifts the curve from D to D_1, causing the currency to appreciate.



3.2 Equilibrium Exchange Rate and Its Movement

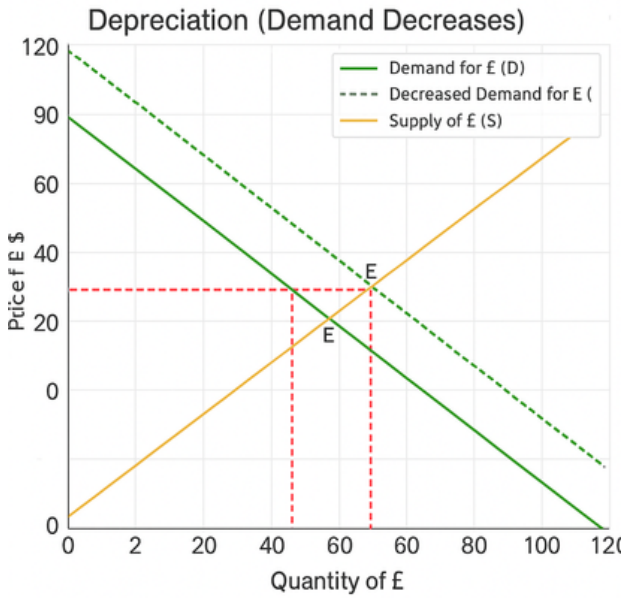
MOVEMENT OF THE EQUILIBRIUM EXCHANGE RATE

Decrease in Demand for Currency

- Demand Decreases ($D \rightarrow D_2$)
- Caused by a fall in exports, reduced foreign investment, or political instability.
- Fewer foreigners buy the domestic currency → demand curve shifts left.
- Exchange rate falls → domestic currency depreciates.

EXAMPLE

- If global demand for Malaysian palm oil drops, foreign importers need fewer ringgit.
- The decreased demand pushes the exchange rate lower, leading to depreciation.



Shifted D and S with new equilibrium points)

3.2 Equilibrium Exchange Rate and Its Movement

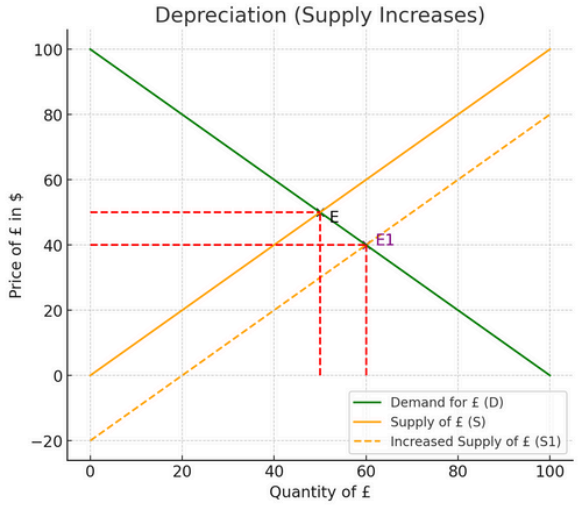
MOVEMENT OF THE EQUILIBRIUM EXCHANGE RATE

Increase in Supply of Currency

- Supply Increases ($S \rightarrow S_1$)
- Occurs when imports, outward investment, or overseas spending rise.
- More domestic currency is sold to buy foreign currency → supply curve shifts right.
- Exchange rate decreases → domestic currency depreciates.

EXAMPLE

- When Malaysians spend more on imported vehicles and foreign travel, the supply of MYR in the market rises, weakening the ringgit.



Shifted D and S with new equilibrium points)

3.2 Equilibrium Exchange Rate and Its Movement

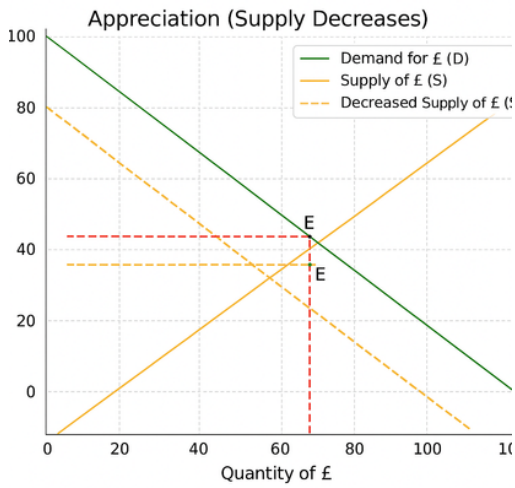
MOVEMENT OF THE EQUILIBRIUM EXCHANGE RATE

Decrease in Supply of Currency

- Supply Decreases ($S \rightarrow S_2$)
- Occurs when imports fall or when foreign investment outflows are reduced.
- Less domestic currency is sold → supply curve shifts left.
- Exchange rate increases → domestic currency appreciates.

EXAMPLE

- If Malaysia cuts back on imports due to higher global prices, fewer ringgit are exchanged for foreign currency.
- Reduced supply of MYR helps strengthen the ringgit.



Shifted D and S with new equilibrium points)

3.2 Equilibrium Exchange Rate and Its Movement

CALCULATING THE EQUILIBRIUM EXCHANGE RATE

Equilibrium Exchange Rate Formulas

General Condition

$$Q_d = Q_s$$

The equilibrium exchange rate (EER) occurs where quantity demanded of a currency equals its quantity supplied.

Linear Demand and Supply Functions

$$Q_d = a - bE$$

$$Q_s = c + dE$$

Where:

- Qd = Quantity of domestic currency demanded
- Qs = Quantity of domestic currency supplied
- E = Exchange rate (price of domestic currency in foreign currency)
- a,b,c,d = constants reflecting market behavior

Equilibrium Exchange Rate

At equilibrium, Qd=Qs

$$a - bE = c + dE$$

$$E = \frac{a - c}{b + d}$$

This formula gives the equilibrium exchange rate based on demand and supply parameters.

Equilibrium Quantity

Once E is known: $Q = a - bE$ or $Q = c + dE$

Either formula gives the same equilibrium quantity of currency exchanged.

3.2 Equilibrium Exchange Rate and Its Movement

CALCULATING THE EQUILIBRIUM EXCHANGE RATE

EXAMPLE

- Given the following demand and supply functions for a country's currency:

$$Q_d = 300 - 3E$$

$$Q_s = -60 + 5E$$

- Required:
  - Find the equilibrium exchange rate (E).
  - Calculate the equilibrium quantity (Q).

Answer

Step 1: Set equilibrium condition

$$Q_d = Q_s$$

$$300 - 3E = -60 + 5E$$

Step 2: Simplify and solve for E

$$300 + 60 = 8E$$

$$360 = 8E$$

$$\boxed{E = 45}$$

Step 3: Substitute E into one of the equations to find Q

$$Q = 300 - 3(45)$$

$$Q = 300 - 135 = \boxed{165}$$

3.3 Government influence and Central Bank intervention on exchange rates.

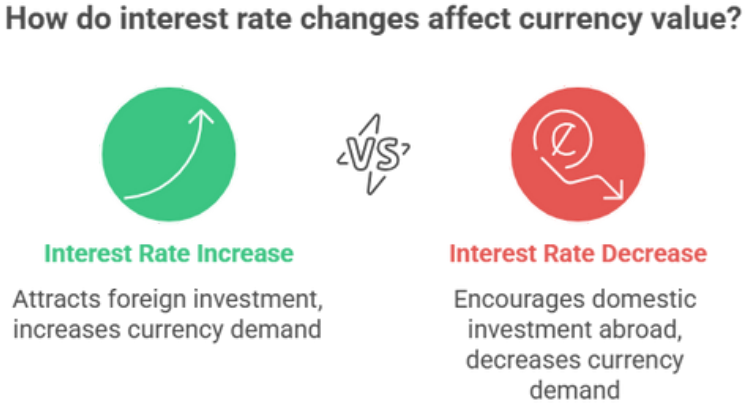
Governments and central banks often intervene in the foreign exchange market to influence the value of their domestic currency. These interventions aim to stabilize the exchange rate, control inflation, encourage exports, and maintain investor confidence.
The institution responsible for such actions is usually the Central Bank, such as Bank Negara Malaysia (BNM).

WHEN INTEREST RATE INCREASES

- Foreign investors move funds into the country to gain from higher returns.
- Demand for the domestic currency increases.
- The currency appreciates in value.
- Example:
  - If Bank Negara Malaysia raises its policy rate above regional levels, global investors shift funds into Malaysian bonds and deposits.
  - This increases demand for the ringgit, causing the MYR to strengthen temporarily.

WHEN INTEREST RATE DECREASES

- Domestic investors look abroad for better returns.
- Foreign capital outflows increase.
- Demand for foreign currency rises.
- The domestic currency depreciates.
- Example:
  - If interest rates in Malaysia fall below Singapore's, Malaysian investors may move funds into Singaporean assets.
  - Demand for SGD rises, leading to a weaker ringgit.



3.3 Government influence and Central Bank intervention on exchange rates.

Governments and central banks often intervene in the foreign exchange market to influence the value of their domestic currency. These interventions aim to stabilize the exchange rate, control inflation, encourage exports, and maintain investor confidence.
The institution responsible for such actions is usually the Central Bank, such as Bank Negara Malaysia (BNM).

Objectives of Central Bank Intervention

- To reduce excessive volatility in exchange rates.
- To maintain competitiveness of exports by managing appreciation or depreciation.
- To control inflationary pressure from imported goods.
- To restore market confidence during periods of financial instability.
- To align currency values with economic fundamentals.

3.3 Government influence and Central Bank intervention on exchange rates.

There are two main types of central bank intervention in the foreign exchange market: direct intervention and indirect intervention.

- Direct Intervention
  - The central bank directly enters the foreign exchange market to buy or sell its own currency against foreign currencies.
  - This action immediately affects the exchange rate by altering the demand and supply of the domestic currency.
  - It is often used to stabilize sudden fluctuations or correct undesired currency movements.
- Indirect Intervention
  - The central bank influences exchange rates through monetary policy tools and regulatory measures rather than direct currency trading.
  - It works by changing economic conditions or market expectations, such as adjusting interest rates or managing liquidity.
  - The effect is gradual and policy-driven, aimed at achieving long-term currency stability.

DIRECT INTERVENTION

- Buying Domestic Currency
- Selling Domestic Currency
- Coordinated Intervention
- Sterilized vs Non-Sterilized Intervention

INDIRECT INTERVENTION

- Monetary Policy Tools (Interest Rate Adjustment)
- Reserve Requirement and Liquidity Control
- Capital Controls and Regulations
- Moral Suasion (Official Statements)

3.3 Government influence and Central Bank intervention on exchange rates.

DIRECT INTERVENTION FROM CENTRAL BANK

- When the domestic currency weakens excessively, the central bank may buy its own currency using foreign exchange reserves (such as U.S. dollars or euros).
- By doing so, the supply of the domestic currency decreases in the forex market, creating upward pressure on its value.
- This action helps strengthen (appreciate) the currency and restore confidence among traders and investors.

EXAMPLE

- Suppose the ringgit falls sharply from RM4.70 to RM4.90 per USD due to capital outflows.
- Bank Negara Malaysia may intervene by selling U.S. dollars and buying ringgit using its reserves.
- This reduces the circulation of ringgit in the market and increases its demand, pushing the rate back toward RM4.70.
- Such intervention sends a signal that the central bank is ready to defend the currency, discouraging further speculation.

3.3 Government influence and Central Bank intervention on exchange rates.

DIRECT INTERVENTION FROM CENTRAL BANK

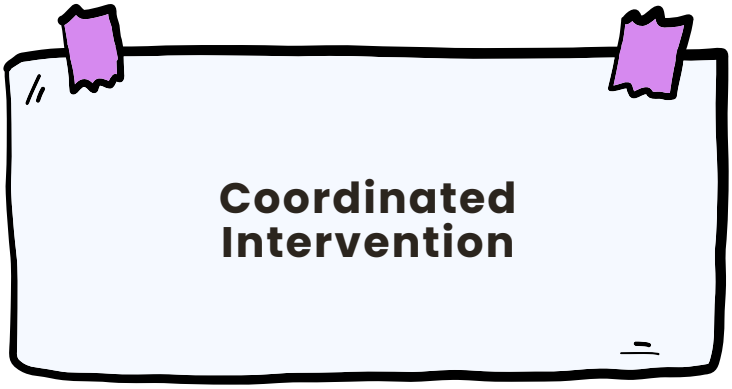
- When the domestic currency becomes too strong, it can make exports expensive and reduce competitiveness.
- In such cases, the central bank may sell its own currency and buy foreign currencies to weaken it slightly.
- This increases the supply of the domestic currency in the forex market, leading to depreciation.

EXAMPLE

- If the ringgit appreciates to RM4.30 per USD and Malaysian exporters start losing price competitiveness, BNM may sell ringgit in exchange for U.S. dollars.
- The higher supply of ringgit causes a moderate depreciation, perhaps returning the rate to RM4.45.
- This makes Malaysian exports cheaper for foreign buyers, supporting trade and economic growth.

3.3 Government influence and Central Bank intervention on exchange rates.

DIRECT INTERVENTION FROM CENTRAL BANK



- Coordinated intervention occurs when several central banks act together to influence exchange rates.
- This collective effort is typically used during periods of regional or global instability to prevent extreme currency swings or to support a partner country facing severe depreciation.
- Joint action increases the impact of intervention because it combines the financial strength and credibility of multiple countries.

EXAMPLE

- During global financial uncertainty, ASEAN+3 (ASEAN countries plus China, Japan, and South Korea) may cooperate through the Chiang Mai Initiative, a joint reserve pooling system.
- If one member's currency (such as the ringgit or baht) weakens sharply, participating central banks can release funds in U.S. dollars to stabilize it.
- This combined action restores confidence and reduces volatility across the region.

3.3 Government influence and Central Bank intervention on exchange rates.

DIRECT INTERVENTION FROM CENTRAL BANK

- Direct interventions can be sterilized or non-sterilized, depending on how the central bank manages the impact on domestic money supply.
- Sterilized Intervention
  - The central bank offsets the effect of its currency transactions on the domestic money supply through open market operations, such as selling or buying government securities.
  - This ensures that the intervention affects the exchange rate but not the overall liquidity in the banking system.
- Non-Sterilized Intervention
  - The central bank does not neutralize the monetary impact.
  - As a result, the domestic money supply changes which can influence interest rates, borrowing, and inflation levels.

EXAMPLE

- If BNM buys ringgit using foreign reserves, liquidity in the banking system decreases because ringgit is withdrawn from circulation.
- To prevent credit tightening, BNM may later sell government bonds to inject liquidity back into the market.
- This balancing action makes it a sterilized intervention, maintaining currency stability without disrupting domestic financial conditions.

3.3 Government influence and Central Bank intervention on exchange rates.

INDIRECT INTERVENTION FROM CENTRAL BANK

Monetary Policy Tools (Interest Rate Adjustment)

- One of the most effective indirect tools is interest rate management.
- Changes in interest rates influence capital flows, investor behavior, and demand for the domestic currency.
- Higher interest rates attract foreign investors seeking better returns → increased demand for domestic currency → appreciation.
- Lower interest rates encourage borrowing and spending at home → reduced foreign inflows → depreciation.

EXAMPLE

- If Malaysia experiences rising inflation and a weakening ringgit, BNM may increase the Overnight Policy Rate (OPR).
- This move makes Malaysian financial assets more attractive to foreign investors, increasing demand for the ringgit and stabilizing its value.
- Conversely, lowering the OPR during economic slowdown helps stimulate spending but can lead to slight depreciation.

3.3 Government influence and Central Bank intervention on exchange rates.

INDIRECT INTERVENTION FROM CENTRAL BANK

- The central bank also manages liquidity in the economy by adjusting reserve requirements or conducting open market operations.
- By controlling the amount of money banks can lend, the central bank influences overall money supply and currency value.
- Tighter liquidity (higher reserve requirement) → fewer ringgit in circulation → appreciation.
- Looser liquidity (lower reserve requirement) → more ringgit supply → depreciation.

EXAMPLE

- To stabilize a weakening currency, BNM may raise the Statutory Reserve Requirement (SRR) from 2% to 3%.
- This forces banks to hold more funds with BNM, reducing the ringgit supply in the market.
- The reduced liquidity supports the ringgit's strength without direct market intervention.

3.3 Government influence and Central Bank intervention on exchange rates.

INDIRECT INTERVENTION FROM CENTRAL BANK

Capital Controls and Regulations

- Capital controls refer to government measures that restrict or manage cross-border capital flows.
- These regulations aim to reduce currency volatility caused by short-term speculative movements or large capital withdrawals.
- They can be temporary or targeted, depending on the severity of market pressure.

EXAMPLE

- During the 1997–1998 Asian Financial Crisis, Malaysia introduced capital controls to stop massive outflows of foreign investment that were weakening the ringgit.
- Foreign investors were temporarily restricted from converting ringgit assets into foreign currencies.
- This allowed BNM to regain control of monetary policy and stabilize the exchange rate, protecting the economy from further speculative attacks.

3.3 Government influence and Central Bank intervention on exchange rates.

INDIRECT INTERVENTION FROM CENTRAL BANK

- Moral suasion involves the central bank using public communication or persuasive statements to influence expectations and behavior in the forex market.
- This is a psychological tool — it does not involve direct trading or policy changes, but can still calm markets and guide investor sentiment.

EXAMPLE

- If the ringgit depreciates sharply due to speculation, BNM may issue a statement assuring that Malaysia's economic fundamentals remain strong and that the central bank is ready to act if necessary.
- Such communication often reassures investors, discourages panic selling, and helps the ringgit recover without any direct intervention.

EXERCISE 3

1. State five major determinants of exchange rates.

2. Explain how inflation rate differences affect the value of a currency.

3. Discuss how inflation and interest rate differentials between two countries can lead to appreciation or depreciation of a currency

4. What happens to the exchange rate if demand for a currency increases?

5. Explain the role of expectations in determining exchange rate movements.

EXERCISE 3

6

Given: $Q_d = 320 - 5E$

$Q_s = -80 + 7E$

a. The equilibrium exchange rate
b. The equilibrium quantity
c. Explain what happens to the exchange rate if demand increases further.

7

Differentiate between direct and indirect central bank interventions.

8

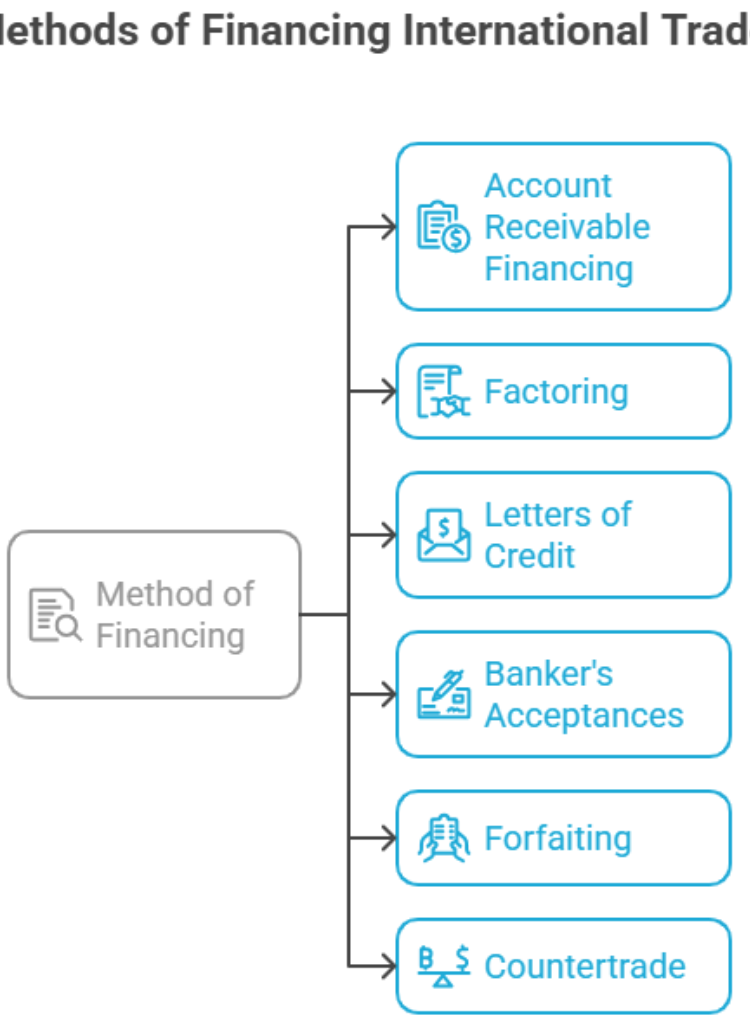
Discuss four types of direct and indirect interventions used by central banks.

CHAPTER 4

TRADE FINANCING

4.1 Method of financing international trade

- International trade involves significant financial risks due to distance, time, and uncertainty between buyers and sellers.
- To reduce these risks and ensure smooth transactions, various trade financing methods are used.
- Each method provides a different balance of security, cost, and flexibility depending on whether the exporter or importer holds more bargaining power.



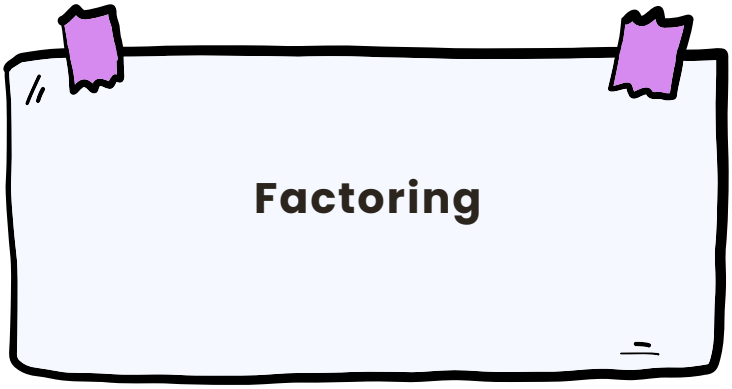
4.1 Method of financing international trade

- Accounts receivable financing is a short-term funding method where an exporter uses its outstanding invoices (receivables) as collateral to obtain cash from a financial institution before payment is received from foreign buyers.
- Under this arrangement, the exporter ships goods to the buyer and issues an invoice payable at a future date (e.g., 30, 60, or 90 days).
- Instead of waiting for payment, the exporter approaches a bank or finance company for an advance — usually 70–90% of the invoice value.
- Once the buyer pays, the exporter receives the remaining balance minus financing charges.
- This method improves the exporter's cash flow, allowing them to continue operations while waiting for payment.
- However, the exporter still bears the risk of buyer default, since ownership of the receivable remains with the exporter.

EXAMPLE

- A Malaysian furniture exporter sells RM200,000 worth of goods to a buyer in Japan with 60-day credit terms.
- The exporter applies for financing from a local bank, which advances 85% (RM170,000) of the invoice value.
- When the Japanese buyer pays after 60 days, the bank deducts interest and fees before releasing the remaining balance.

4.1 Method of financing international trade

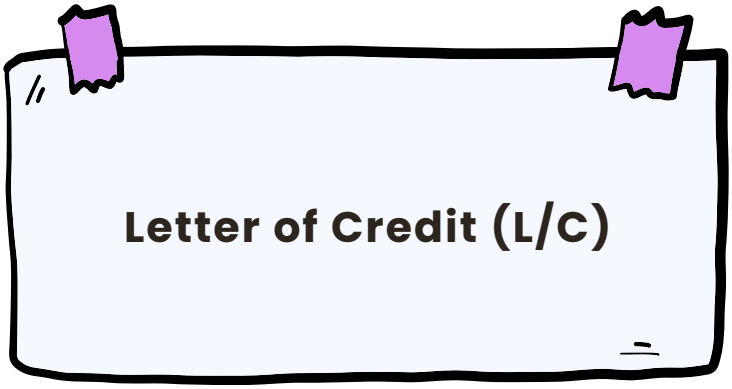


- Factoring is a financial arrangement where an exporter sells its accounts receivable to a specialized financial institution known as a factor at a discounted value to obtain immediate cash.
- Unlike accounts receivable financing, in factoring the ownership of the receivable is transferred to the factor.
- The factor assumes responsibility for collecting payments from the foreign buyers and may also offer protection against non-payment (non-recourse factoring).
- The exporter benefits from improved liquidity, reduced administrative burden, and lower credit risk.
- Factoring is common for short-term export sales and open account transactions where buyers are trusted but payment delays are expected.
- Types of Factoring
  - Recourse Factoring: Exporter bears the risk if the buyer fails to pay.
  - Non-Recourse Factoring: The factor assumes all risk of non-payment.

EXAMPLE

- A Malaysian electronics exporter sells invoices worth RM100,000 to a factoring company at a 3% discount.
- The exporter receives RM97,000 immediately, while the factor collects full payment from the overseas buyer later.
- If it's non-recourse factoring, the exporter has no further obligation if the buyer defaults.

4.1 Method of financing international trade



- A Letter of Credit is a written undertaking by a bank on behalf of the importer to pay the exporter a specified amount, provided that the exporter complies with all terms and conditions stated in the L/C.
- An L/C is one of the most secure methods of payment in international trade because it substitutes the creditworthiness of the importer with that of the bank.
- The issuing bank guarantees payment to the exporter once the required shipping documents — such as bill of lading, invoice, and certificate of origin — are presented.
- There are different types of L/C, including:
  - Revocable / Irrevocable L/C
  - Confirmed L/C (guaranteed by a second bank)
  - Sight / Usance L/C (immediate vs delayed payment)
- Flow:
  - Buyer applies for an L/C through their bank.
  - Issuing bank sends the L/C to the exporter's bank.
  - Exporter ships goods and submits documents.
  - Bank verifies documents and makes payment.

EXAMPLE

- A Malaysian palm oil exporter receives an L/C from a bank in India guaranteeing payment upon submission of shipment documents.
- Once the exporter ships the oil and presents the required papers, the advising bank in Malaysia pays immediately.
- This eliminates risk of non-payment.

4.1 Method of financing international trade

- A Banker's Acceptance is a time draft or bill of exchange drawn by an exporter and accepted ("guaranteed") by a bank, committing the bank to pay the holder a specified amount on a future date.
- When a bank "accepts" the bill, it becomes a negotiable instrument that can be sold or discounted in the money market.
- This allows exporters to receive immediate funds while buyers are given credit terms (usually 30–180 days).
- BAs are widely used for short-term trade financing because they are safe, liquid, and carry low risk.
- Process:
  - Exporter draws a time draft on importer's bank.
  - Bank accepts it (guarantees payment on maturity).
  - Exporter discounts the BA for immediate cash.
  - On maturity, the bank pays the holder in full.

EXAMPLE

- An exporter receives a 90-day Banker's Acceptance valued at USD 50,000, discounted at 4% per annum.
- The exporter can sell the BA in the market to receive about USD 49,500 immediately.
- At maturity, the bank pays the full amount to the holder.

4.1 Method of financing international trade

- A Banker's Acceptance is a time draft or bill of exchange drawn by an exporter and accepted ("guaranteed") by a bank, committing the bank to pay the holder a specified amount on a future date.
- When a bank "accepts" the bill, it becomes a negotiable instrument that can be sold or discounted in the money market.
- This allows exporters to receive immediate funds while buyers are given credit terms (usually 30–180 days).
- BAs are widely used for short-term trade financing because they are safe, liquid, and carry low risk.
- Process:
  - Exporter draws a time draft on importer's bank.
  - Bank accepts it (guarantees payment on maturity).
  - Exporter discounts the BA for immediate cash.
  - On maturity, the bank pays the holder in full.

EXAMPLE

- An exporter receives a 90-day Banker's Acceptance valued at USD 50,000, discounted at 4% per annum.
- The exporter can sell the BA in the market to receive about USD 49,500 immediately.
- At maturity, the bank pays the full amount to the holder.

4.1 Method of financing international trade

- Forfaiting is a medium- to long-term trade financing method where the exporter sells its future receivables (from capital goods or large projects) to a financial institution known as a forfaiter, at a discount, on a non-recourse basis.
- It is mainly used for high-value exports such as machinery, ships, or infrastructure components with payment terms of 1 to 5 years.
- The forfaiter pays the exporter immediately and assumes full risk of collecting payment from the foreign buyer.
- The buyer's debt is usually guaranteed by a bank or government agency in the importer's country.

EXAMPLE

- A German engineering firm sells power plant equipment worth USD 5 million to a Malaysian company under a 3-year payment schedule.
- The exporter sells the receivables to a forfaiter at a 6% discount, receiving USD 4.7 million immediately.
- The forfaiter collects payments from Malaysia over three years, taking on all default risks.

4.1 Method of financing international trade

- Countertrade is a reciprocal trading arrangement in which goods or services are exchanged for other goods or services instead of cash payment.
- It is often used when one country faces foreign currency shortages or trade restrictions.
- Countertrade helps countries continue trading without relying heavily on hard currency.
- There are several forms of countertrade, including:
  - Barter: Direct exchange of goods of equal value.
  - Counterpurchase: Two separate contracts — one for sale, one for purchase of unrelated goods.
  - Buyback: Exporter supplies equipment and agrees to accept part of the output as payment.
  - Offset: Exporter agrees to source materials or invest in the importing country.

EXAMPLE

- Malaysia exports palm oil to a country with limited USD reserves and, in return, imports fertilizers and machinery of equivalent value.
- Both parties benefit without cash transactions, promoting bilateral trade cooperation.

4.1 Method of financing international trade

COMPARATIVE SUMMARY OF TRADE FINANCING METHODS

Method	Nature	Duration	Risk Level	Key Feature
Accounts Receivable Financing	Loan on invoice	Short-term	Moderate	Cash advance against receivable
Factoring	Sale of receivable	Short-term	Low–Moderate	Ownership transferred to factor
Letter of Credit	Bank guarantee	Short/Medium	Low	Payment secured by bank
Banker's Acceptance	Discounted draft	Short-term	Low	Tradable and guaranteed by bank
Forfaiting	Sale of future receivables	Medium-term	Very Low	Non-recourse, for capital goods
Countertrade	Goods-for-goods	Variable	Moderate–High	Used in non-convertible currency trade

4.2 Trade financing schemes

- Trade financing schemes provide structured ways for businesses to obtain assets or financial support for trading activities.
- These schemes help importers, exporters, and local firms acquire equipment, manage payments, or build trust in cross-border transactions.

Types of Trade Financing Scheme

Leasing

Hire purchase

Counter trade

Bank Guarantee

4.2 Trade financing schemes

- Leasing is a financing arrangement in which a business (the lessee) obtains the right to use an asset owned by another party (the lessor) for a specific period in exchange for regular rental payments.
- Under a lease agreement, the lessor retains ownership of the asset, while the lessee uses it for production or business operations.
- This scheme is ideal for firms that need expensive equipment — such as machinery, vehicles, or technology — but prefer to avoid large upfront payments.
- Leasing improves liquidity since the company can spread payments over time rather than purchasing the asset outright.
- It also allows businesses to upgrade equipment easily when the lease ends, keeping operations efficient and competitive.
- Types of Leasing
  - Operating Lease: Short-term; ownership remains with the lessor. Asset can be returned at the end.
  - Finance Lease: Long-term; lessee bears maintenance costs and may purchase the asset after lease expiry.

EXAMPLE

- A Malaysian logistics company leases cargo trucks from a finance company for five years.
- It pays a fixed monthly rental and uses the vehicles for deliveries without owning them.
- After five years, the company can either renew the lease, return the trucks, or buy them at a residual price.

4.2 Trade financing schemes

- Hire Purchase (HP) is a financing method where a buyer obtains an asset by paying an initial deposit followed by periodic instalments.
- Ownership is transferred to the buyer only after the final payment is made.
- Hire purchase enables businesses to acquire capital goods while spreading payments over time.
- The financier (usually a bank or leasing company) purchases the asset on behalf of the buyer and leases it to them until all instalments are paid.
- The buyer gains possession immediately, but legal ownership remains with the financier until full payment is completed.
- Hire purchase agreements are often used for machinery, commercial vehicles, or industrial equipment where ownership at the end of the contract is desired.

EXAMPLE

- A construction firm needs an excavator costing RM600,000.
- It pays 20% (RM120,000) as a down payment and finances the balance through hire purchase over three years at 8% interest.
- The firm uses the excavator immediately and becomes the legal owner after making the final instalment.

4.2 Trade financing schemes

- Countertrade is a reciprocal trade arrangement where goods or services are exchanged for other goods or services, rather than paid for with cash.
- It allows trade to occur between countries with limited foreign currency or strict exchange controls.
- Countertrade helps maintain international trade relationships when financial resources are constrained.
- It is especially common between developing nations or in transactions involving large-scale government contracts.
- The value of goods exchanged is determined through negotiation, and transactions may be balanced over multiple shipments.
- Major Forms of Countertrade:

Barter

- Barter is the simplest and oldest form of countertrade. It involves a direct exchange of goods or services between two parties without using money.
- Both sides agree on the value of their products, and the transaction happens simultaneously.
- This arrangement is often used between countries with non-convertible currencies or where trust is built over time. The key challenge lies in matching the needs and values of the exchanged goods.

4.2 Trade financing schemes

Counterpurchase

- In a counterpurchase, two separate contracts are signed.
- The first contract: the exporter sells goods to the importer for cash.
- The second contract: the exporter agrees to buy unrelated goods from the same importer at a later date, usually of similar value.
- This form allows both parties to maintain accounting records in monetary terms while still promoting reciprocal trade.

Buyback

- A buyback occurs when an exporter provides capital goods, machinery, or technology to a foreign partner and agrees to accept a portion of the output produced with those goods as payment.
- This method is common in industrial projects, particularly when the importer lacks immediate funds but can repay through future production.

4.2 Trade financing schemes

Countertrade

Offset

- Offset arrangements are typically used in large government or defense contracts.
- Here, the exporter commits to invest, transfer technology, or purchase goods from the importing country as part of the trade deal.
- Offsets help the importing country develop local industries and create employment while still acquiring high-value imports.

4.3 Roles and function of financial institution in finance activities

- Financial institutions play a vital role in facilitating international trade by providing funding, credit guarantees, insurance, and advisory services.
- Their support enables exporters and importers to manage payment risks, access working capital, and expand into global markets.

- In Malaysia, the main institutions involved in trade financing are:
  - Export-Import Bank of Malaysia (EXIM Bank)
  - Commercial Banks
  - Non-Banking Financial Intermediaries (NBFIs)
- Each of these institutions plays a distinct but complementary role within the financial ecosystem:
  - Some institutions focus on promoting export-led growth and providing specialized facilities to companies venturing abroad.
  - Others handle the day-to-day financial operations of international trade, such as issuing Letters of Credit, processing Banker's Acceptances, and facilitating foreign exchange transactions.
  - Meanwhile, non-bank intermediaries offer alternative financing and guarantee schemes that support small and medium-sized enterprises (SMEs) and strategic development projects that may not qualify for traditional bank loans.

4.3 Roles and function of financial institution in finance activities

Export-Import Bank of Malaysia (EXIM Bank)

- EXIM Bank Malaysia is a development financial institution (DFI) owned by the Government of Malaysia under the Ministry of Finance.
- It was established to promote Malaysia's export-led growth and to assist companies venturing abroad, especially in high-risk markets or developing economies.

ROLES AND FUNCTIONS

Provide Export Credit Financing

- EXIM Bank offers pre-shipment and post-shipment financing to exporters.
- This ensures they have sufficient working capital to produce, ship, and receive payment for goods sold internationally.

Support Overseas Investment Projects

- The bank finances Malaysian companies that invest abroad, including joint ventures, construction projects, and infrastructure development.
- This promotes Malaysia's global business presence.

4.3 Roles and function of financial institution in finance activities

Export-Import Bank of Malaysia (EXIM Bank)

ROLES AND FUNCTIONS

Offer Export Credit Insurance and Guarantee Schemes

- EXIM Bank protects exporters against the risk of non-payment caused by buyer insolvency, political instability, or currency restrictions in the importing country.

Provide Advisory and Trade Information Services

- The bank assists businesses in evaluating international opportunities, assessing country risks, and identifying potential partners.

Facilitate Government Policy Goals

- EXIM Bank supports national initiatives such as expanding trade with developing countries and promoting strategic sectors like green technology, halal exports, and maritime services.

4.3 Roles and function of financial institution in finance activities

- Commercial banks are the primary financial intermediaries that handle day-to-day trade financing operations.
- They provide a wide range of products that facilitate payments, manage risks, and improve liquidity for both importers and exporters.

ROLES AND FUNCTIONS

Provide Trade Financing Facilities

- Offer working capital loans, overdrafts, and short-term credit for exporters awaiting payment.
- Support importers through trust receipts and import financing arrangements.

Issue and Confirm Letters of Credit (L/C)

- Commercial banks act as issuing or advising banks, ensuring that exporters are paid once shipment documents comply with L/C terms.
- This provides a secure mechanism for cross-border transactions.

4.3 Roles and function of financial institution in finance activities

ROLES AND FUNCTIONS

Handle Banker's Acceptances (BA) and Bills of Exchange

- Banks accept, discount, or trade these instruments to provide immediate liquidity to exporters, ensuring smooth cash flow.

Facilitate Foreign Exchange Transactions

- They buy and sell foreign currencies, manage exchange rate risks, and provide forward contracts to hedge against fluctuations.

Offer Guarantees and Performance Bonds

- Banks issue bid bonds, performance guarantees, and advance payment guarantees to build confidence between international partners.

Provide Advisory and Risk Management Services

- Commercial banks guide clients on financing structures, foreign regulations, and country-specific risk mitigation.

4.3 Roles and function of financial institution in finance activities

Non-bank financial intermediaries (NBFIs)

- Non-Banking Financial Institutions (NBFIs) are financial intermediaries that offer banking-like services but do not hold a full commercial banking license.
- They play a crucial role in mobilizing funds, providing financing, managing risks, and supporting economic sectors that may not be adequately served by commercial banks.
- NBFIs operate under various regulatory frameworks such as the Development Financial Institutions Act 2002 (DFIA), the Financial Services Act 2013 (FSA), or under supervision of other government agencies like the Securities Commission (SC) and Co-operative Commission of Malaysia (SKM).
- In the context of international finance, they facilitate cross-border trade, investment, and financial flows through export financing, insurance, guarantees, and long-term project funding.
- These institutions work closely with Bank Negara Malaysia (BNM), the Ministry of Finance (MOF), and agencies such as MATRADE and MIDA to support Malaysia's global economic engagement.

4.3 Roles and function of financial institution in finance activities

Non-bank financial intermediaries (NBFIs)

ROLES AND FUNCTIONS

Provide Alternative Financing Options

- NBFIs help businesses acquire equipment and working capital through leasing, hire purchase, and factoring.
- They fill financing gaps where conventional banks are unable or unwilling to lend.

Support SME Development through Credit Guarantees

- Agencies such as the Credit Guarantee Corporation (CGC) assist SMEs by partially guaranteeing loans from banks, reducing lending risk and improving access to credit.

Offer Development and Project Financing

- Some NBFIs like Bank Pembangunan Malaysia Berhad (BPMB) and SME Bank provide medium- to long-term loans for infrastructure, industrial, and high-technology projects.

4.3 Roles and function of financial institution in finance activities

Non-bank financial intermediaries (NBFIs)

ROLES AND FUNCTIONS

Promote Capital Market and Investment Activities

- NBFIs such as venture capital firms and Malaysia Debt Ventures (MDV) support technology-based companies and innovation sectors

Assist in Risk Sharing and Insurance Services

- Institutions like Perbadanan Insurans Deposit Malaysia (PIDM) and Malaysia Export Credit Insurance Berhad (MECIB) (now part of EXIM Bank) protect businesses against loan defaults or export risks.

4.3 Roles and function of financial institution in finance activities

Non-bank financial intermediaries (NBFIs)

DEVELOPMENT FINANCIAL INSTITUTIONS (DFIS)

Institution	Main Contribution to International Finance
Bank Pembangunan Malaysia Berhad (BPMB)	Provides **long-term development and syndicated loans** for infrastructure, maritime, and technology projects with foreign participation. Supports cross-border collaborations and international contracting.
SME Bank Malaysia	Helps SMEs expand overseas through **export working-capital schemes and trade facilities** in collaboration with agencies such as MATRADE. Example: funds halal-product exporters entering ASEAN markets.
Agrobank	Finances exporters of **agricultural and agro-based products**, including pre-export and post-shipment funding. Example: supports palm-oil and cocoa exporters fulfilling foreign contracts.
Bank Rakyat	Provides **Shariah-compliant trade financing and letters of credit** for Malaysian importers and exporters, especially SMEs in halal trade.
Bank Simpanan Nasional (BSN)	Supports **international remittance and agent-banking services** that connect Malaysians abroad to local financial systems, promoting inclusion and cross-border connectivity.

4.3 Roles and function of financial institution in finance activities

INSURANCE AND TAKAFUL COMPANIES

Institution	Contribution
Permodalan Nasional Berhad (PNB) & Amanah Saham Nasional Berhad (ASNB)	Invest in regional and global equities, allowing Malaysians to participate in international markets.
Employees Provident Fund (EPF/KWSP)	Allocates part of its portfolio to **foreign assets** (equities, bonds, and property) to diversify and earn global returns.
Malaysia Debt Ventures (MDV)	Finances high-tech firms, including **ICT exporters** and digital-service providers expanding abroad.

4.3 Roles and function of financial institution in finance activities

Non-bank financial intermediaries (NBFIs)

INSURANCE AND TAKAFUL COMPANIES

Example	International Function
Etiqa Insurance / Takaful Malaysia / Allianz Trade	Provide **marine cargo, export credit, and investment insurance** to cover losses from shipment damage or foreign buyer default.
Prudential BSN Takaful / Zurich Takaful	Offer international **risk-management coverage** for firms operating abroad or shipping globally.

4.3 Roles and function of financial institution in finance activities

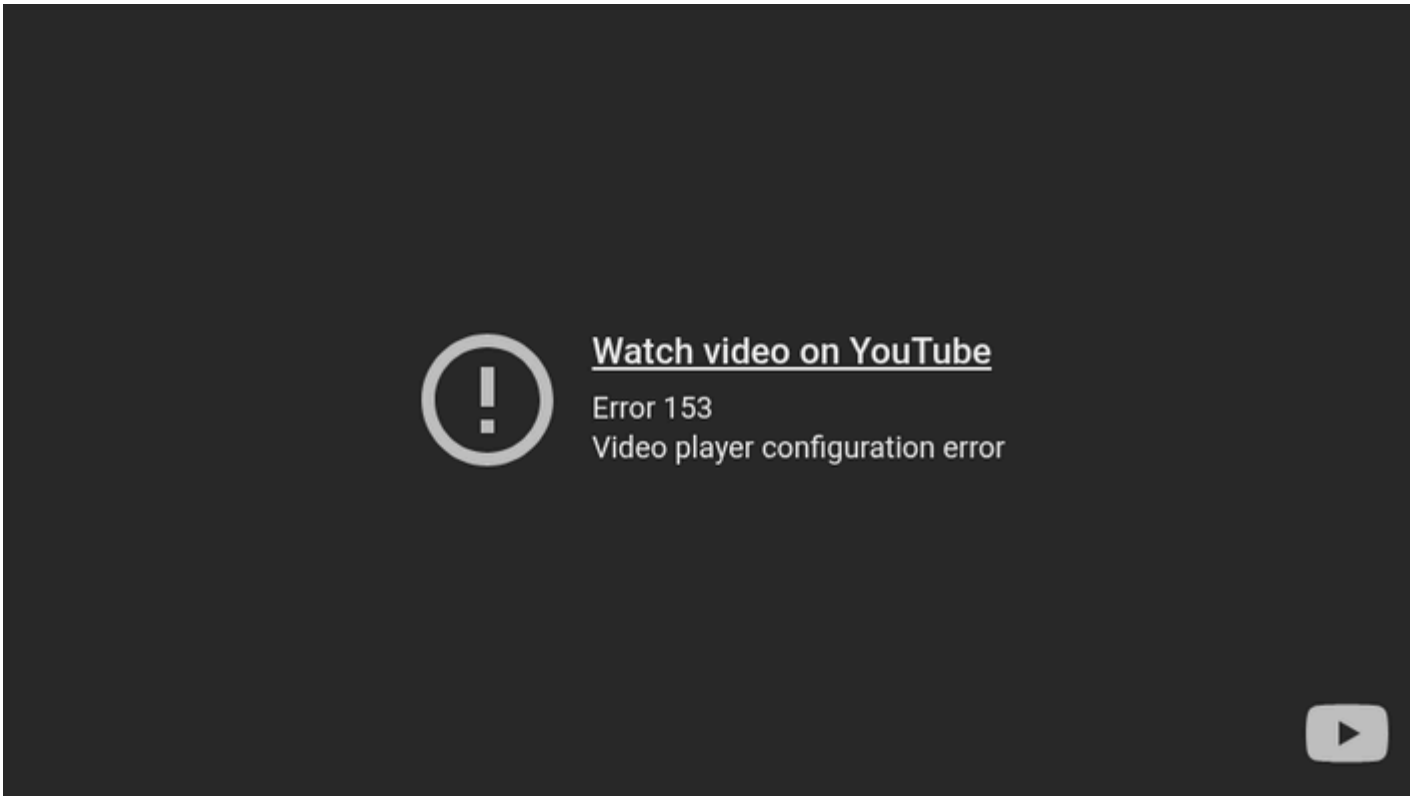
Non-bank financial intermediaries (NBFIs)

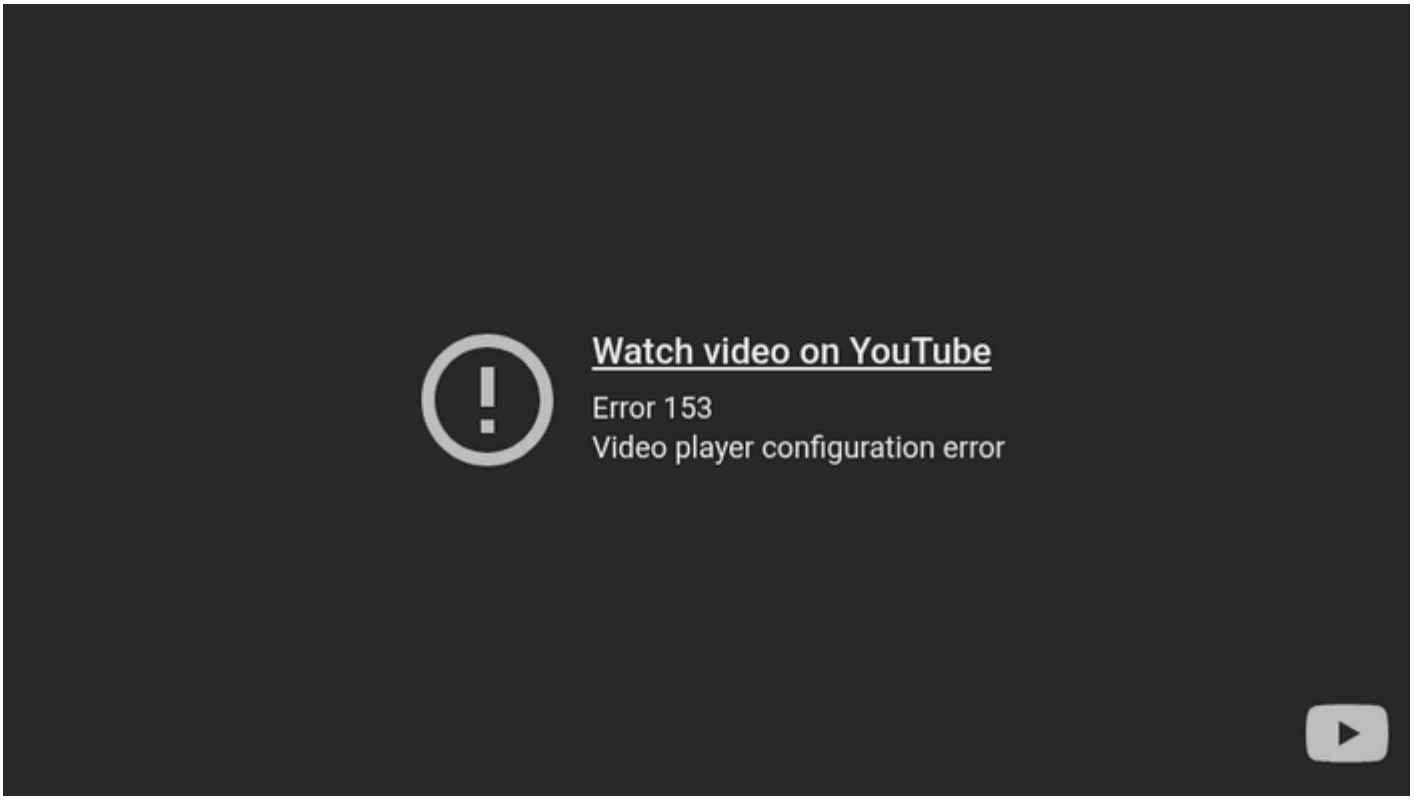
CAPITAL-MARKET AND VENTURE-INVESTMENT INSTITUTIONS

Example	Contribution
Securities Commission Malaysia (SC)	Regulates cross-border securities investments and foreign listings on Bursa Malaysia.
Venture-capital and private-equity firms	Fund Malaysian startups expanding abroad or foreign firms investing in Malaysia.

4.3 Roles and function of financial institution in finance activities

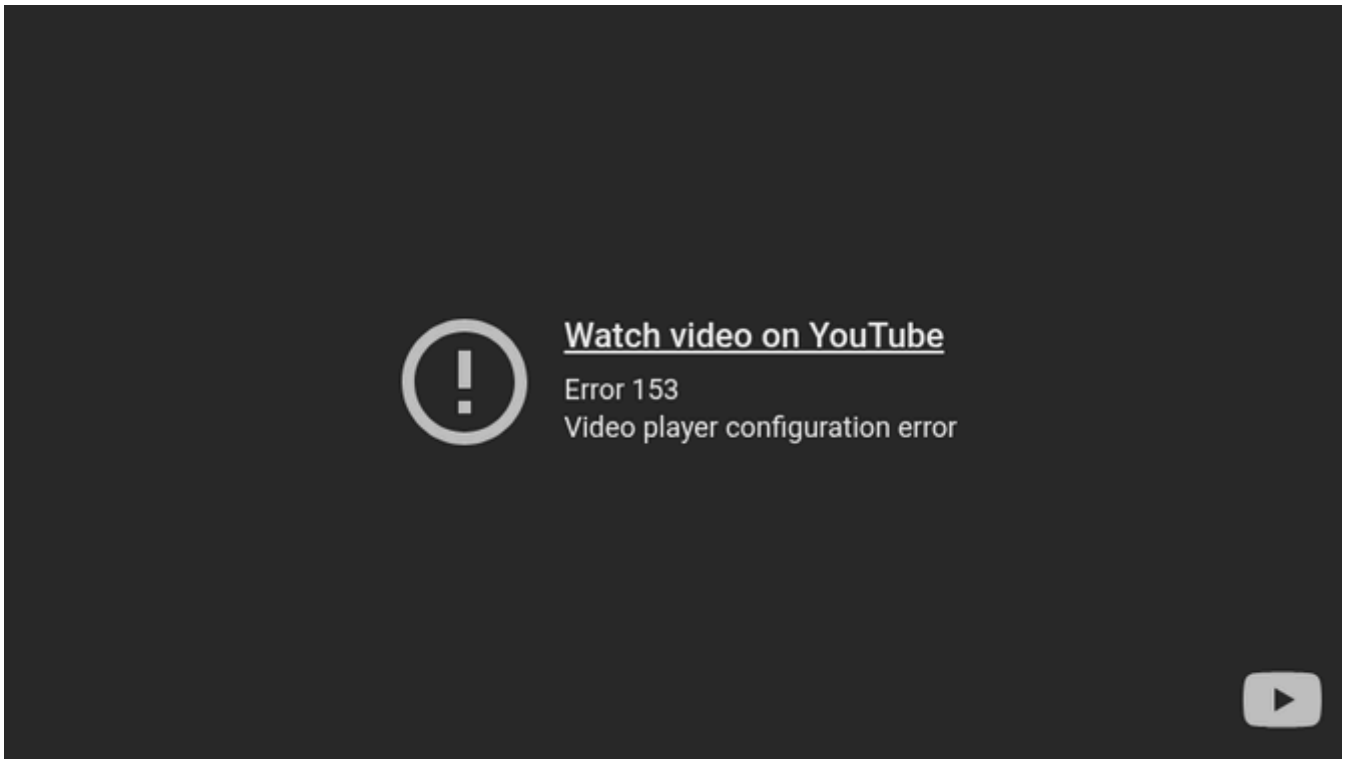
EXAMPLE

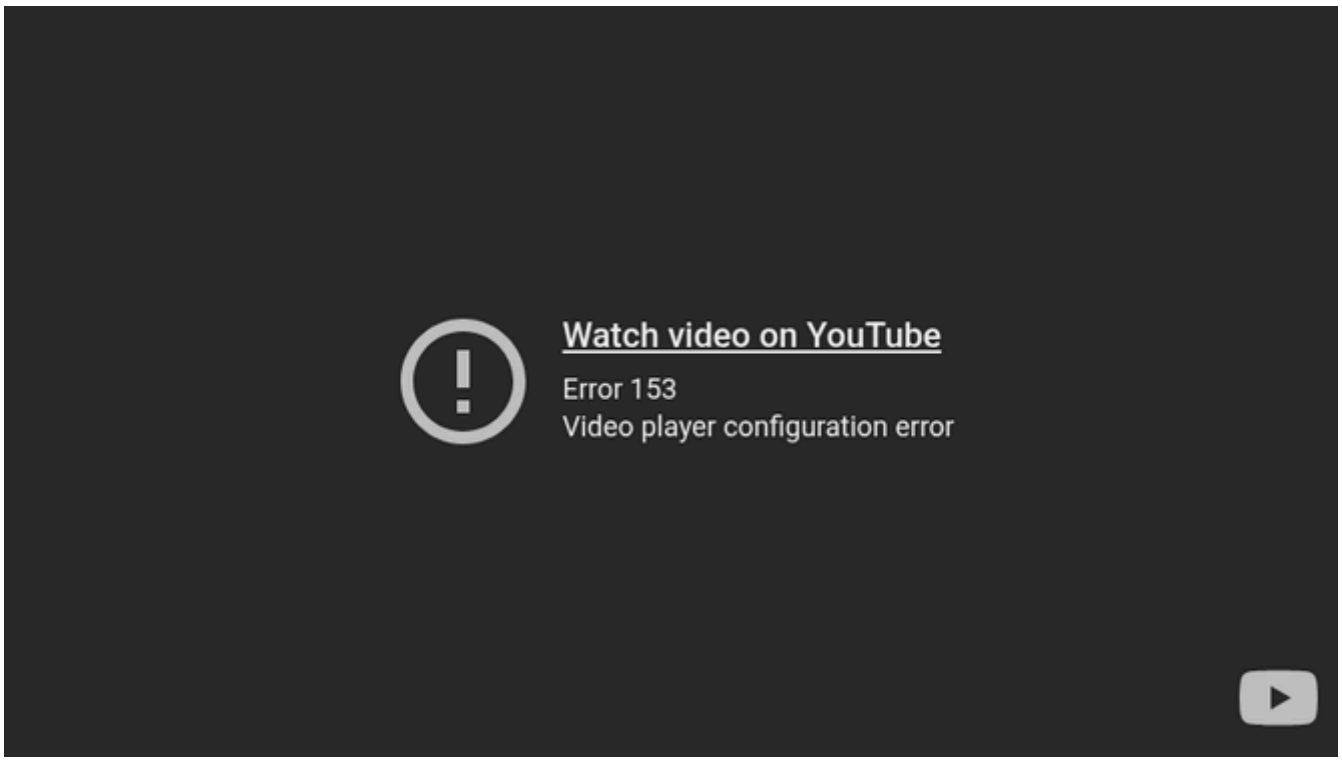




4.3 Roles and function of financial institution in finance activities

EXAMPLE





EXERCISE 4

1. Explain the roles of different financial institutions (commercial banks, DFIs, and non-banking financial intermediaries) in supporting international trade financing.

2. Discuss the main trade-financing services provided by commercial banks and explain how each service reduces payment risk in global trade.

3. Compare short-term and long-term financing methods used by exporters and importers. Identify one example of each and explain how they assist international transactions.

4. Analyze how Non-Banking Financial Institutions (NBFIs) — such as insurance companies, SME Bank, and BPMB — complement commercial banks in promoting Malaysia's participation in international finance.

CHAPTER 5

METHODS OF PAYMENT

5.0 Methods of Payment in International Business

- In international trade, buyers and sellers are usually in different countries. They need reliable payment methods to reduce risks such as fraud, non-payment, or shipment issues. Below are the common methods of payment.

- For the seller, the worry is not getting paid after sending the goods. For the buyer, the worry is not getting the goods as promised. If the buyer pays too early, the goods might come late, in bad condition, or not come at all.

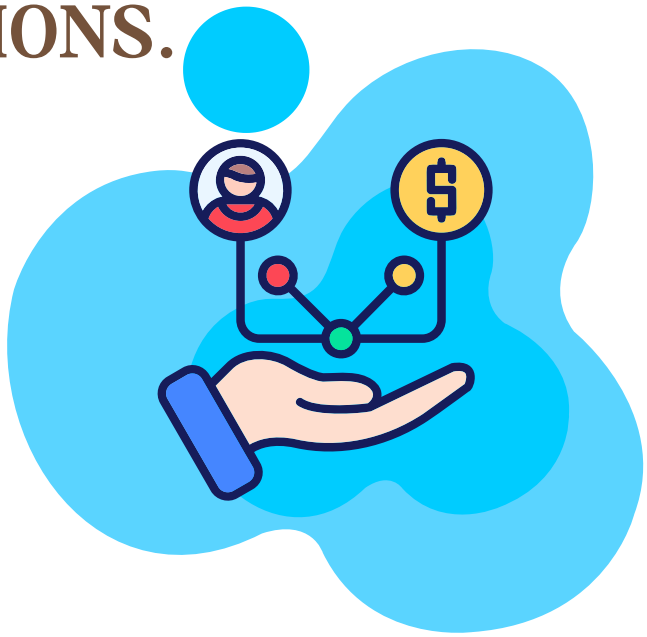
- Different payment methods are used to reduce risks in international trade. Some protect the seller more, while others protect the buyer. For example, cash advance is very safe for the seller but risky for the buyer, while clean collection is safer for the buyer but risky for the seller. In between, methods like documentary collection and letters of credit give fair protection to both sides.

- The choice of method depends on trust, the value of the goods, and the situation of each country. Long-term partners may use simple methods like bank remittance, but for first-time or high-value deals, safer methods such as letters of credit are often chosen.

- In short, payment methods help reduce risks, give security, and make international trade smoother. Without them, many businesses would not want to trade across borders.

5.1 Analyze Methods of Payment in International Business Transactions

5.1.1 DETERMINE THE METHODS OF PAYMENT IN INTERNATIONAL BUSINESS TRANSACTIONS.



Payment in international trade is more complex than domestic transactions due to: Distance and lack of direct contact between parties. Different currencies and banking systems. Political and economic risks. Exchange control regulations.

Main concern: Exporter's risk: Buyer may not pay. Importer's risk: Seller may not ship after payment.

.

5.1.1 Determine methods of payment in international business transactions.

A. PREPAYMENT

Definition: Importer pays before exporter ships goods.

In a form of international wire transfer or bank draft.

Give maximum protection to exporter; maximum risk to importer.

Usage Situations:

- New or unknown buyers.
- Buyers in countries with unstable financial systems.
- When exporter has strong market power. Importer's concern: No guarantee that goods will be shipped.

Common in:

- E-commerce
- Small orders
- High-demand products

5.1.1 Determine methods of payment in international business transactions.

B. LETTER OF CREDIT (L/C)

- A written commitment by the importer's bank to pay exporter once shipment documents are received and verified.

- Banks involved:
  1. Issuing Bank – Importer's bank that issues the L/C.
  2. Advising/Confirming Bank – Exporter's bank that verifies documents and ensures payment.

- Protection:
  1. Exporter relies on bank's creditworthiness, not
  2. importer's. Importer pays only after shipment is confirmed.

- Type: Usually irrevocable (cannot be cancelled without exporter's consent).

- Key documents use in L/C are Bill of Lading and Commercial Invoice

5.1.1 Determine methods of payment in international business transactions.

C. Letter of Credit (L/C)

Process:

- Importer requests L/C from its bank.
- Issuing bank sends L/C to exporter's bank.
- Exporter ships goods.
- Exporter submits shipping documents to its bank.
- Banks verify documents.
- Payment released to exporter

5.1.1 Determine methods of payment in international business transactions.

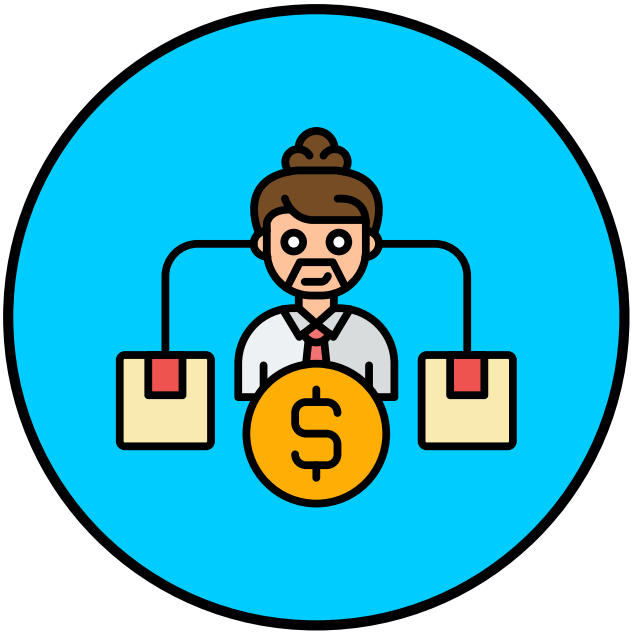
D. Drafts (Bill of Exchange)

- A written order from exporter instructing importer to pay a specific amount on presentation or on a future date.
- Used with or without L/C.
- Processed through banks → known as Documentary Collection.
- Two main types: Sight Draft (Documents Against Payment – D/P) Payment made upon presentation of documents. Goods released only after payment. Exporter has moderate protection.
- Time Draft (Documents Against Acceptance – D/A) Payment made at a future date (e.g., 30–180 days). Importer signs (accepts) the draft → promises to pay later. Exporter provides short-term credit and carries risk until maturity

5.1.1 Determine methods of payment in international business transactions.

E. Consignment

- A variation of the open account method.
- Payment is made only after the goods have been sold by the foreign distributor to the end customer.
- Exporter retains title/ownership of goods until they are sold.
- Exporter ships goods but retains ownership until importer sells them to end customers.
- Payment timing: Only after importer sells the goods.
- Involves a contractual arrangement where:
  1. The foreign distributor/agent receives, manages, and sells the goods.
  2. The exporter remains the legal owner until sale occurs.
  3. No immediate payment upon shipment.
- Usually based on a strong, long-term partnership



5.1.1 Determine methods of payment in international business transactions.

E. Consignment

ADVANTAGES

1 to importer:

Improves cash flow (no upfront payment)

2 to exporter:

Helps improve exporter competitiveness through:

- Faster delivery and better product availability in foreign markets.
- Reduced inventory costs, as the distributor handles storage and management.
- Builds market presence and customer confidence abroad

DISADVANTAGES

1 to exporter

High risk for exporter:

- No guarantee of payment.
- Goods are held in a foreign country by an independent distributor.
- Possible non-payment or misuse of goods.
- Financial exposure until sales occur

5.1.1 Determine methods of payment in international business transactions.

E. Consignment

- Risk mitigation:

1. Partner with a reputable and trustworthy foreign distributor or third-party logistics provider (3PL).
2. Obtain insurance coverage to protect:
3. Consigned goods in transit.
4. Goods stored with a foreign distributor.
5. Risk of non-payment or damage

5.1.1 Determine methods of payment in international business transactions.

F. Open Account

1. A sales transaction in which goods are shipped and delivered before payment is due.
2. Payment period is typically 30, 60, or 90 days after shipment.
3. Credit is extended by the exporter to the importer.
4. Key Characteristics

- Most favorable to the importer.
- Highest risk for the exporter.
- Based on trust and long-term relationship.
- Common in markets where competition is strong and buyers demand credit terms

5.1.1 Determine methods of payment in international business transactions.

F. Open Account

1. A sales transaction in which goods are shipped and delivered before payment is due.
2. Payment period is typically 30, 60, or 90 days after shipment.
3. Credit is extended by the exporter to the importer.
4. Key Characteristics

- Most favorable to the importer.
- Highest risk for the exporter.
- Based on trust and long-term relationship.
- Common in markets where competition is strong and buyers demand credit terms

5.1.1 Determine methods of payment in international business transactions.

E. Open Account

ADVANTAGES

1 to importer:

Improves cash flow (pays later after receiving goods). Reduces financing costs (no upfront payment)

2 to exporter:

- Can increase sales by offering competitive credit terms.
- Helps maintain good customer relationships

DISADVANTAGES

1 to exporter

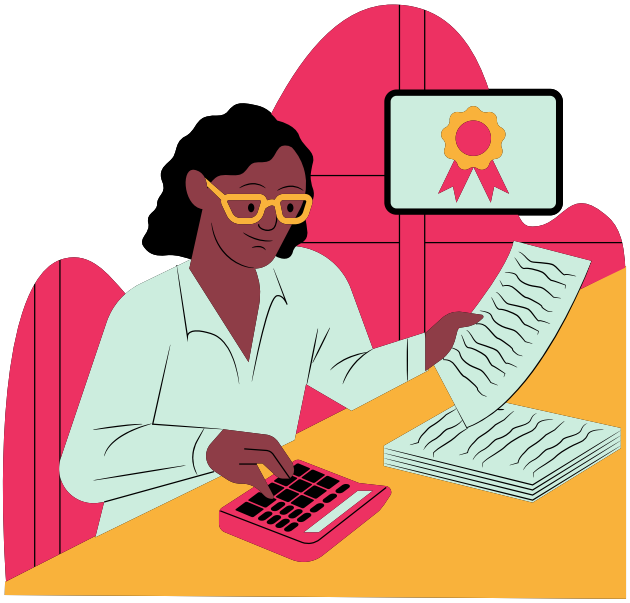
- No assurance of payment after shipment.
- Difficult to recover goods once shipped.
- Potential exposure to foreign exchange restrictions or political risk

5.1 Analyze Methods of Payment in International Business Transactions

F. Open Account

1. Reasons Exporters Offer Open Account Competitive pressure:

- Buyers may choose other suppliers offering better credit terms.
- Market expansion:
- Helps exporters gain entry into foreign markets.
- Established relationships: Used when importer's reliability is proven.



1. Risk Mitigation Strategies

- Obtain export credit insurance to cover non-payment risk.
- Use trade finance techniques (e.g., factoring, forfaiting) to secure early payment.
- Conduct credit checks and assess importer's financial health.
- Maintain clear written agreements on payment terms and conditions.

CHAPTER 6

Financial Risks

6.1 Definition of Financial Risk

- Financial risk is the possibility that a person or a business may lose money or face financial difficulties. These risks usually happen because of unexpected events that are outside of our control. In the business world, financial risk is a common challenge that every company must deal with.

- One common source of financial risk is when customers fail to pay their debts or delay payments. This creates problems for businesses because they still need to cover their own expenses such as salaries, raw materials, and loan repayments. If too many customers do not pay on time, the business may struggle with cash flow.

- Financial risk can also come from the market itself. Changes in interest rates, stock prices, or commodity prices can affect the profit of a business. For example, a company that depends on raw materials like oil or wheat may suffer losses if the prices suddenly increase in the global market.

- Another important area is foreign exchange. When companies trade across countries, they often deal with different currencies. If exchange rates change unexpectedly, the amount received after conversion may be lower than expected, leading to financial loss.

6.2 Explain the Types of Financial Risks

Credit Risk

- **Definition**: Credit risk happens when a buyer or borrower fails to pay back what they owe.

- **Example**:
  If customer buys goods on credit but later cannot pay, the seller faces a credit risk.

Market Risk

- **Definition**: Market risk comes from changes in market conditions such as stock prices, interest rates, or commodity prices

- **Example**:
  If oil prices drop suddenly, a company selling oil may lose money.

Liquidity Risk

- **Definition**: Liquidity risk occurs when a company does not have enough cash to pay bills or run daily operations, even though it owns assets.

- **Example**:
  A business may have property but no cash to pay salaries on time.

6.2 Explain the Types of Financial Risks

Foreign Exchange Risk

- **Definition**: This risk comes from changes in currency exchange rates.
- **Example**:
  A Malaysian exporter sells goods to the US in US dollars. If the dollar weakens against the ringgit, the exporter may get less money after conversion.

Operational Risk

- **Definition**: Operational risk happens due to failures in internal processes, systems, or human errors.
- **Example**:
  A bank system crash delays transactions, or a staff mistake causes financial loss.

Legal Risk

- **Definition**: Legal risk arises when a company faces lawsuits, penalties, or legal disputes.
- **Example**:
  If a company breaks a contract or ignores regulations, it may have to pay heavy fines.

6.3 Examine the Suitable Strategies to Mitigate Those Risks

Legal Risk

Follow laws, get legal advice, and make clear contracts.
Example: A shipping company hires legal advisors to make sure contracts follow international trade rules.

Credit Risk

Check customer background, ask for deposits, or use insurance.
Example: A Malaysian exporter asks a new buyer to pay 30% deposit before shipping goods..

Market Risk

Diversify products or use hedging to fix prices.
Example: A palm oil company locks in prices through futures contracts to avoid sudden price drops.

Liquidity Risk

Keep enough cash or arrange backup credit with banks.
Example: A trading company keeps three months of expenses as cash and has an overdraft facility with Maybank.

Foreign Exchange Risk

Use forward contracts or trade in stable currencies like USD.
Example: An electronics exporter locks in the yen–ringgit rate to avoid losses from currency changes.

Operational Risk

Train staff, use reliable systems, and prepare backup plans.
Example: A bank has a backup data system so services continue even if the main system fails.

6.4 Create Awareness of Ethical Issues Regarding Financial Risk

SCAM

Scams involve cheating or tricking people to steal money. For example, fake investment schemes that promise high returns but disappear with people's savings.

BRIBERY

Bribery happens when money or gifts are given to influence someone's decision unfairly. For example, paying an official to approve a business license faster is unethical and illegal.

MONEY LAUNDERING

Money laundering is hiding the source of illegally earned money by passing it through legitimate businesses or banks. For example, criminals may use restaurants or property deals to "clean" dirty money.

REFERENCES

- Madura, J. (2021). International Financial Management (14th ed.). Boston, MA, USA: Cengage.

- Frederic S Mishkin (2021). Economics of Money, Banking, and Financial Markets (13th edition).